Instruction Manual

Foreword

Thanks for choosing the vehicle manufactured by GAC MOTOR CO., LTD. (hereinafter referred to as “GAC Motor”). For a better driving pleasure, please read the *Owner’s Manual* carefully. This manual allows you to fully understand the operation methods and precautions of the vehicle. Proper operation of the vehicle can improve driving safety and prolong the service life of the vehicle.

The *Warranty Manual* supplied with the vehicle clearly describes the warranty services provided by GAC Motor and the regular maintenance of the vehicle. Please read this manual carefully to know your rights and responsibilities.

After reading this manual, please store it with the vehicle for future reference.

In case of any doubts about this manual, please contact GAC Motor authorized shop for detailed explanation.

If you have any suggestions or recommendations, please contact GAC Motor through the customer service hotline: 400-158-9999.

We are grateful for your support and love for GAC Motor. Have a nice drive!

GAC MOTOR CO., LTD.

Safety Instructions

The safety of you and the passengers is crucial, so driving safely is an important responsibility of the driver.

In order to make clear the safety precautions, we provide operation steps and precautions through the various signs on the vehicle and this manual, reminding you to pay attention to the potential dangers that will hurt you or the passengers.

It is impossible to list all the precautions for danger related to operation and maintenance of the vehicle in the manual, so it is up to you to make the correct judgment in time.

Safety instructions are available in many forms, including:

- **Safety signs** - pasted on the vehicle.
- **Safety notes** - the texts marked with the symbols , , and one of the three words **“WARNING”**, **“CAUTION”** or **“NOTE”** in front.

⚠ WARNING	Very important instructions of which the nonobservance is likely to cause casualties.
CAUTION	Important instructions of which the nonobservance is likely to cause damage to the vehicle.
i NOTE	General instructions of which the nonobservance could not cause injuries.

- Some paragraphs of this manual do not apply to all vehicle models. For the description of options, the title of them is followed by the symbol “*”.
- Unless otherwise specified, the directions of the vehicle (front, rear, left and right) referred to in this manual are based on the traveling direction of the vehicle.

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◆ **Be sure to fasten the seat belt correctly**

The seat belt is the best protection device in the event of a collision. Airbags are only designed as auxiliaries, rather than replacements, of the seat belts, so even if the vehicle is equipped with airbags, make sure that you and the passengers always fasten the seat belts correctly.

◆ **Do not leave children in an unattended vehicle**

Do not leave children in an unattended vehicle, as injury or even death may occur if they trigger a control device accidentally, or when the vehicle is moved accidentally and collided with other objects due to their mis-operation, and besides, the temperature inside the vehicle may reach an extreme condition, depending on the ambient temperature.

◆ **Protect all children**

Children aged 12 or under should be properly restrained in the 2nd-row seats rather than the front seats. Child safety seats shall be used for infants and toddlers; and child safety seats and three-point seat belts shall be used for older children.

◆ **Beware of danger of airbag**

Airbags can save lives, but they can also cause serious or fatal injuries to occupants who are too close to the airbags or improperly restrained.

Airbags pose the greatest risk to infants, toddlers and short adults, so please follow all instructions and warnings in this manual.

◆ **Never drink and drive**

Drinking alcohol, even a little, will reduce your response capability, and your reaction time after drinking will become longer, so drinking and driving is strictly prohibited.

◆ **During driving, please abide by the road traffic safety laws and yield to pedestrians.**

◆ **Be sure to pay attention to driving safety**

Traffic accident will occur if you are busy answering the phone or handling other things so that you can not pay attention to road conditions, other traffics and pedestrians during driving. Please avoid distraction during driving.

◆ **Control speed**

Excessive speed is one of the main causes of traffic accidents. The faster the speed is, the greater the risk will be. Therefore, please choose the appropriate speed for safe driving according to the actual road conditions.

◆ **Regular maintenance**

Tire burst or mechanical failure is very dangerous. In order to reduce the possibility of such problems, please check the tire pressure and status frequently, and carry out regular maintenance as specified in the *Warranty Manual*.

Event data recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The EDR is mainly designed to record data in the event of certain collisions (such as airbag deployment or collision with a barrier), so as to help understand the operation of the vehicle system. EDR is specially used to record data related to vehicle dynamic control and safety systems in a short period of time for assistance in accident analysis.

NOTE

The EDR will record data only when a certain degree of collision occurs to the vehicle; EDR will not record data during normal driving.

Meaning of data recorded by EDR and their possible uses

When the data element recorded by EDR is “Class A data element + Class B data element”, the meaning of the recorded data is as follows:

Data name	Meaning
Longitudinal delta-V	Change in longitudinal velocity
Maximum recorded longitudinal delta-V	Maximum value of cumulative velocity change in X-axis direction recorded by EDR.
Time to maximum recorded longitudinal delta-V	Time from the zero time to the maximum value of cumulative velocity change in X-axis direction recorded by EDR.
Clipping flag	Time point when the EDR acquisition acceleration (horizontal/vertical) reaches the sensor range for the first time.
Vehicle speed	The vehicle speed is based on the speed of the main driving wheels.
Service brake, on or off	It is for detecting whether the brake pedal is depressed by the driver.
Driver seat belt status	Status of the driver seat belt buckle switch.
Accelerator pedal position, percentage relative to fully open position	The percentage of the actual position of the accelerator pedal to the fully depressed position of the driver.

Data name	Meaning
Revolutions per minute (r/min)	The revolutions per minute of the main crankshaft of the engine, which may not be recorded for battery electric vehicles and plug-in hybrid electric vehicles.
Power-up cycle on event	The number of times the ignition switch is switched from "OFF" to "ON" before the event occurs after the ECU recording the EDR data is first used.
Power-on cycle on reading	The number of times the ignition switch is switched from "OFF" to "ON" before the event data recording occurs after the ECU recording the EDR data is first used.
Complete status of event data record	Status flag indicating whether the event data is fully recorded and stored in the ECU recording EDR data.
Time interval between this event and the last event	Elapsed time from the start of event X to the start of event X-1 (this event and the previous event) if the two events occur successively within 5 s.

Data name	Meaning
Vehicle identification number (VIN)	Vehicle identification number (VIN) assigned by the vehicle manufacturer.
Hardware number of ECU recording EDR data	Hardware number of ECU that implements the EDR recording function.
Serial number of ECU recording EDR data	Serial number of ECU that implements the EDR recording function.
Software number of ECU recording EDR data	Software number of ECU that implements the EDR recording function.
Longitudinal acceleration	The component of the vector acceleration at a point on the vehicle in the X-axis direction.
Lateral acceleration	The component of the vector acceleration at a point on the vehicle in the Y-axis direction.
Lateral delta-V	Change in lateral velocity
Maximum recorded lateral delta-V	Maximum value of cumulative velocity change in Y-axis direction recorded by EDR.
Square of maximum recorded resultant delta-V	The maximum value of the sum of the squares of the vertical delta-V and the lateral delta-V recorded by EDR.

Data name	Meaning
Time to maximum recorded lateral delta-V	Time from the zero time to the maximum value of cumulative velocity change in Y-axis direction recorded by EDR.
Time to square of maximum recorded resultant delta-V	Time from the zero time to the square of maximum recorded resultant delta-V.
Yaw velocity	Change in the angle of the vehicle relative to the Z axis before and during the event (positive for clockwise).
Steering angle	Angular coordinate of the steering wheel: zero position (0°) on this coordinate indicates that the steering wheel is in the center position (straight-line traveling), and a positive value indicates that the steering wheel is turned counterclockwise (left turn), which is applicable to vehicles with a steering angle sensor.
T_{end}	The end of a collision event. If this condition has not been met until the end of the recording period, T_{end} can be defined as the time of the last recorded data point.
YY	The year in which the event occurred.
MM	The month in which the event occurred.

Data name	Meaning
DD	The date on which the event occurred.
Hour	Time of the day (hour) when the event occurred.
min	Time of the day (min) when the event occurred.
s	Time of the day (s) when the event occurred.
Gear to be shifted into	Actual gear position
Engine throttle position (percentage relative to full open position)	Percentage of engine throttle opening.
Brake pedal position	The actual position of the brake pedal (from released position to fully depressed position), which is applicable to vehicles with a brake pedal position sensor.
Parking brake system status	The status of the parking brake (active or inactive).
Turn signal lamp switch status	The status of the switch used to indicate the vehicle's intention to turn or change lanes.
Driver seat belt pretensioner deployment time	Time elapsed from the event start point (T0) to the driver seat belt pretensioner deployment command.

Data name	Meaning
DAB deployment time (stage 1)	Time elapsed from the event start point (T0) to the driver frontal airbag deployment command of stage 1.
DAB deployment time (stage 2)	Time elapsed from the event start point (T0) to the driver frontal airbag deployment command of stage 2.
Driver SAB deployment time	Time elapsed from the event start point (T0) to the driver side airbag deployment command.
Driver CAB deployment time	Time elapsed from the event start point (T0) to the driver side curtain airbag deployment command.
Front passenger seat belt status	Status of the front passenger seat belt buckle switch.
Front passenger seat belt pretensioner deployment time	Time elapsed from the event start point (T0) to the front passenger seat belt pretensioner deployment command.
Front passenger frontal airbag disable status	Disable status of front passenger frontal airbag, which is applicable to vehicles with the frontal airbag disable switch.

Data name	Meaning
PAB deployment time (stage 1)	Time elapsed from the event start point (T0) to the front passenger frontal airbag deployment command of stage 1.
PAB deployment time (stage 2)	Time elapsed from the event start point (T0) to the front passenger frontal airbag deployment command of stage 2.
Front passenger SAB deployment time	Time elapsed from the event start point (T0) to the front passenger side airbag deployment command.
Front passenger CAB deployment time	Time elapsed from the event start point (T0) to the front passenger side curtain airbag deployment command.
SRS alarm status	SRS fault status.
TPMS alarm status	The alarm status when the TPMS detects that the pressure of one or more tires is too low.
Brake system alarm status	Brake system fault status, which is applicable to vehicles on which this alarm status is transmitted via bus
CCS status	CCS operating status
ACC status	ACC operating status.

Data name	Meaning
ABS status	ABS operating status.
AEB status	AEB operating status.
ESP status	ESP operating status.
TCS status	TCS operating status.
Pre-event synchronous timing time	The relative time from the last data sampling point before T0 to T0, which is applicable to vehicles with pre-event timing function, and is used for time alignment of different data.

Note: The actual data recorded by the EDR is subject to the vehicle announcement information.

Possible uses of EDR data

The data recorded by EDR help better understanding the situation in the event of a collision and personal injury, and are used to assist in accident analysis.

GAC Motor will not disclose the data recorded in the EDR to third parties except:

- An agreement is reached with the owner (or the lessee of the rental vehicle).
- At the official request of the police, courts or government agencies.
- If necessary, the data will be used for automobile safety performance studies.

How to obtain EDR data reading tool

Special technical equipment is required to read EDR data. For more information, please contact GAC Motor authorized shop.

How to read data on EDR controller

In order to read the data on the event data recorder (EDR), a special reading tool that complies with GB39732-2020 *Vehicle Event Data Recorder System* or other applicable national standards must be used. Please operate the reading device according to its Operation Instructions.

Description of data source for the vehicle speed in the Class A data element

/

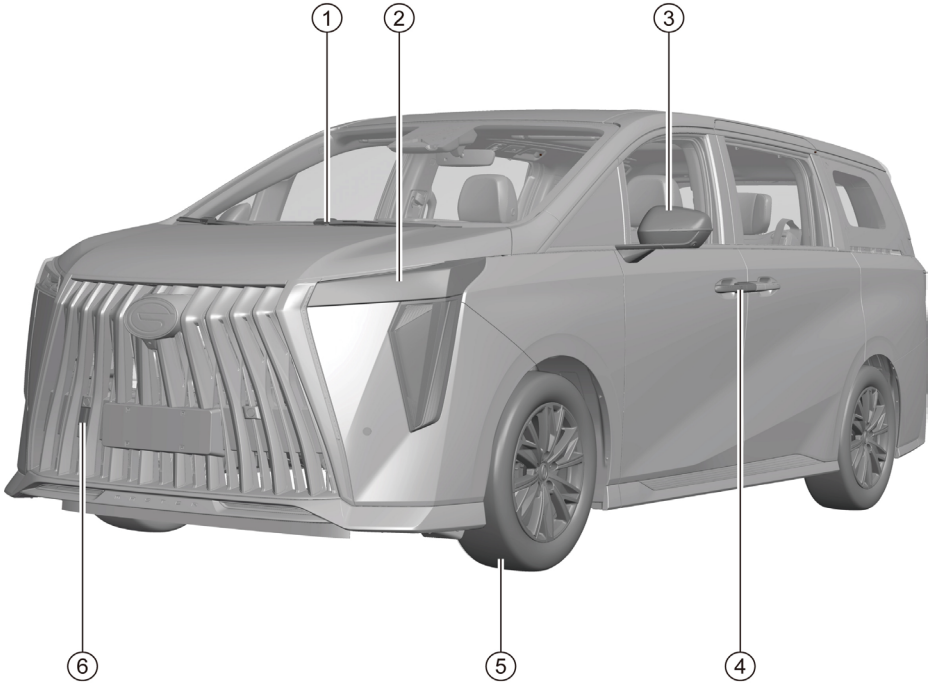
Unlocked event overwriting mechanism and overwritable event types

The current event can overwrite the previous unlocked event data, but the locked event data cannot be overwritten by the data of subsequent events;

Overwritable events (i.e., unlocked events) include:

- Event in which the irreversible restraint device is not deployed;
- Event in which the vehicle speed change in the X-axis direction within 150ms is less than 25km/h.

2.1 Exterior



① Front wiper
- Replacing front windshield wiper blades => See page 264

② Front combination lamp
- Turning on lamps => See page 91

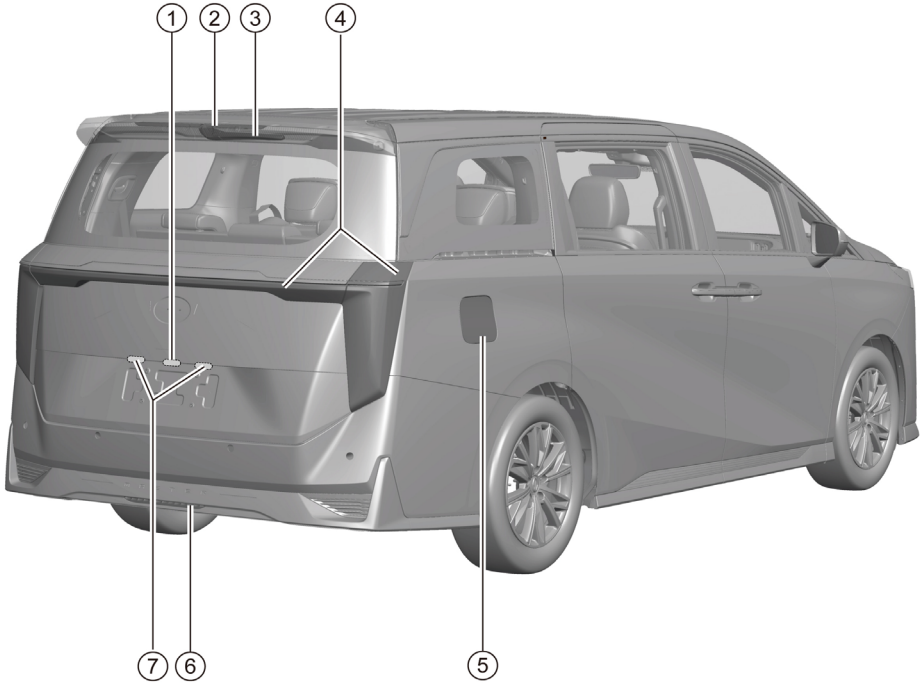
③ Exterior rearview mirror => See page 105
- Side turn signal lamp => See page 92

④ Door lock hole => See page 64

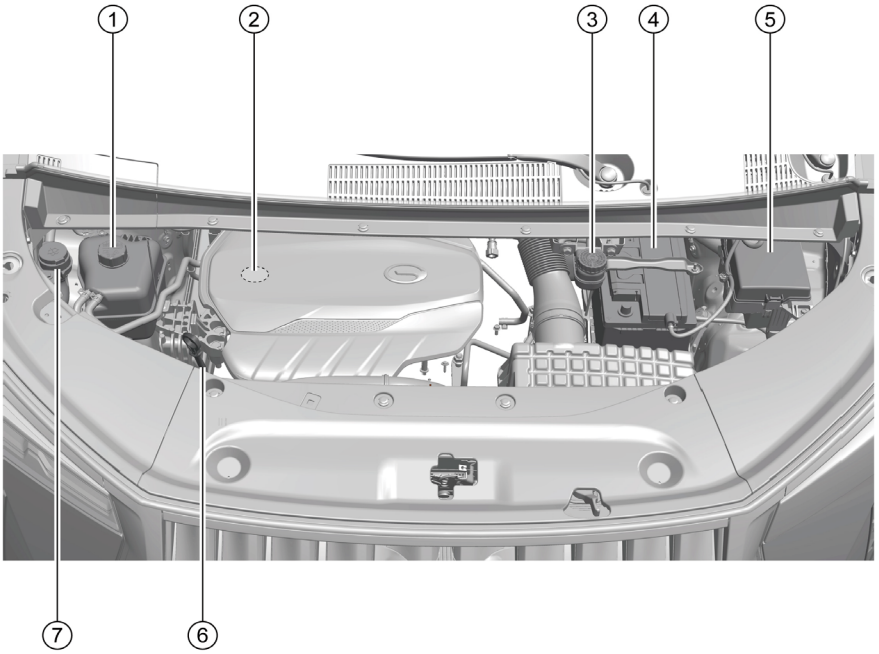
⑤ Wheel => See page 269

⑥ Front towing eye => See page 307

2. Picture index



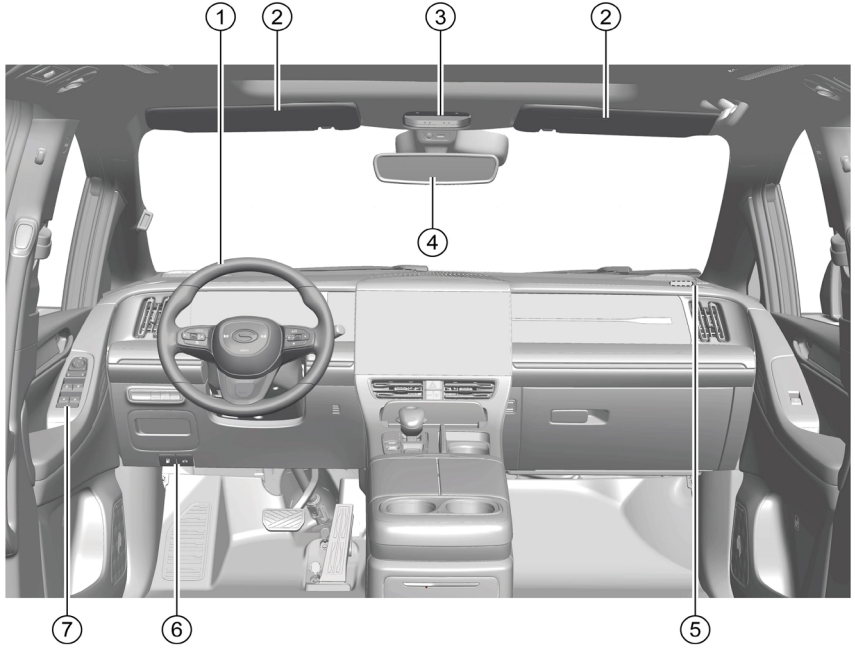
① Liftgate opening button => See page 74
② High-mounted stop lamp
③ Rear wiper
- Replacing rear windshield wiper blades => See page 265
④ Rear combination lamp
⑤ Fuel tank cap => See page 256
⑥ Rear fog lamp (left), reverse lamp (right)
⑦ License plate lamp



Engine compartment

1. Engine expansion tank => See page 262
2. Oil filler cap => See page 260
3. Brake fluid reservoir => See page 266
4. Battery => See page 267
5. Engine compartment PDU => See page 295
6. Oil dipstick => See page 259
7. Windshield washer fluid reservoir => See page 263

2.2 Interior



① Steering wheel => See page 43
- Steering wheel buttons => See page 44
- Driver's frontal airbag => See page 25

② Sun visor => See page 108

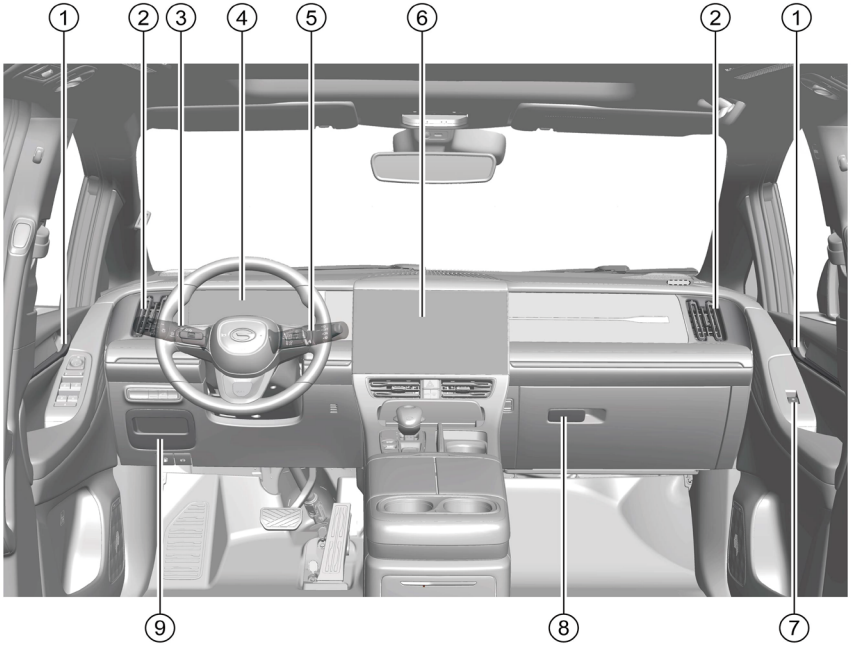
③ Front dome lamp => See page 97
- Power sunroof control button => See page 85
- Power sliding door button => See page 68
- SOS button * => See page 158

④ Interior rearview mirror => See page 103

⑤ Front passenger's frontal airbag => See page 26

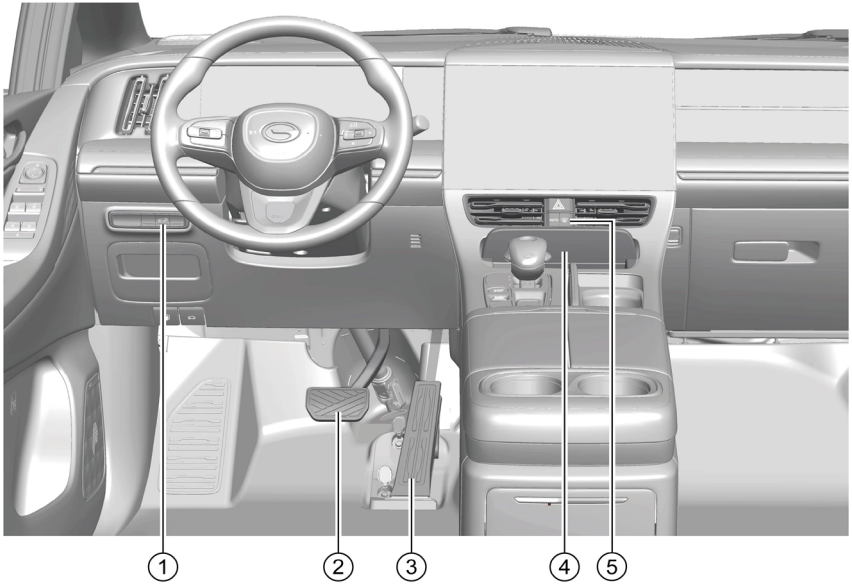
⑥ Engine hood release handle => See page 80
- Fuel filler flap release handle => See page 256

⑦ Driver's power window control button => See page 82
- Central locking button => See page 62
- Exterior rearview mirror adjusting button => See page 105
- Exterior rearview mirror folding button => See page 106
- Window lock button => See page 82



① Inside handle => See page 63
② A/C air outlet => See page 147
③ Lamplight combination switch => See page 91
④ Lamplight combination switch => See page 46
- Indicator lamps => See page 53
⑤ Wiper combination switch => See page 100
⑥ AV system => See page 149
⑦ Passenger's power window control button => See page 83
⑧ Glove box opening handle => See page 124
⑨ Storage box on lower guard plate of cab => See page 121
- Instrument panel PDU => See page 295

2. Picture index



① Instrument panel left switch block:

- Liftgate opening button => See page 75

② Brake pedal

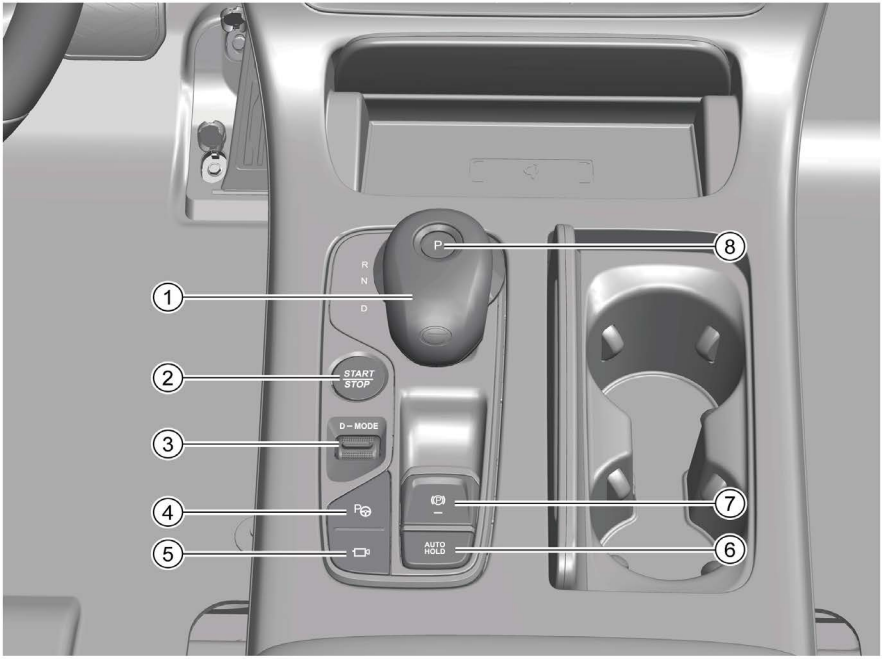
③ Accelerator pedal

④ Instrument panel storage box

- Mobile phone wireless charging area => See page 131

⑤ A/C control buttons => See page 140

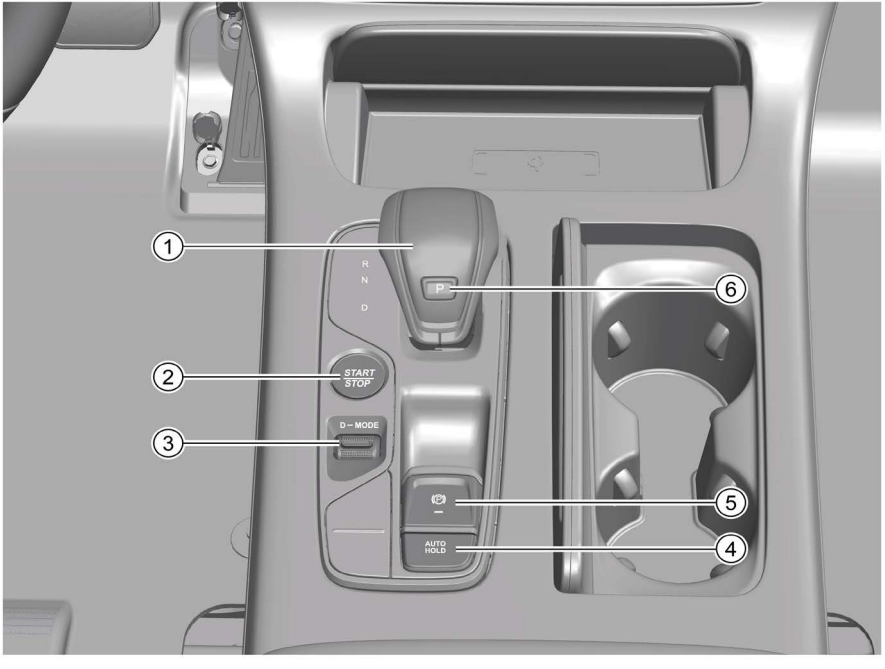
- Hazard warning lamp switch button => See page 95



Type 1:

① Transmission gearshift lever => See page 160
② START/STOP button => See page 157
③ Driving mode knob => See page 162
④ FAPA button* => See page 235
⑤ AVM button => See page 230
⑥ AUTO HOLD button => See page 170
⑦ EPB button => See page 167
⑧ P position button => See page 160

2. Picture index



Type 2:

① Transmission gearshift lever => See page 160
② START/STOP button => See page 157
③ Driving mode knob => See page 162
④ AUTO HOLD button => See page 170
⑤ EPB button => See page 167
⑥ “P” position button => See page 160

3.1 Safe driving

3.1.1 General description

This section introduces important information, operating essentials, recommendations and safety precautions for safe driving. For the safety of you and the passengers, please read carefully and follow the relevant regulations.

i NOTE

Please always keep the *Operating instructions* in the vehicle. If you lend or resell the vehicle to someone else, be sure to hand the complete set of accompanying documents over to the new owner.

The following inspections must be carried out before driving:

- Check that all lamps are working properly.
- Check that the fuel level is normal.
- Check that the coolant level is normal.
- Check that the brake fluid level is normal.
- Check that the engine oil level is normal.
- Check that the windshield washer fluid level is normal.
- Check that the tire pressure is normal.
- Check that the engine hood is closed and locked properly.
- Check that all windows are clear and have a good view.
- Check that there is no object interfering with the movement of the pedal.
- Adjust the seat, head restraint and rearview mirror according to your body height and shape.
- Use appropriate child safety seats to protect children and help them fasten the seat belts correctly.
- Fasten the seat belt correctly and remind all passengers in the vehicle to fasten the seat belts correctly.
- Check that the surrounding environment is safe.

⚠ WARNING

When installing the driver's floor mat, please observe the following precautions:

- **Do not overlap two or more floor mats.**
- **Do not make the bottom surface of the floor mat upward or back-to-front.**
- **Do not use floor mats that are incompatible with this model.**

CAUTION

- Do not distract yourself from driving by external factors.
- Do not drive when your response capability reduces, for example, due to medicines, alcohol, or drugs.
- Strictly abide by traffic regulations.

3.1.2 Correct sitting posture of the driver and passengers

Correct sitting posture of the driver

The driver's sitting posture directly affects his/her fatigue level and driving safety. Before driving, the driver shall carry out the following operations:

- Sit up straight and adjust the seat back to a suitable position so that your back fits completely the seat back.
- Adjust the seat position so that all pedals can be operated effectively with slightly bent legs.
- Correctly adjust the headrest. => See page 109
- Fasten the seat belt correctly. => See page 20
- Adjustment of the steering wheel position => See page 43

⚠ WARNING

Do not adjust the seat, headrest or steering wheel during driving; otherwise the vehicle may be out of control, leading to an accident.

Correct sitting posture of the passengers

To guarantee the safety of the passengers and reduce the risk of casualties, the passengers should:

- Sit up straight and adjust the head restraint of the seat correctly. => See page 109
- Adjust the distance between the seat and the instrument panel as demanded (for front passenger).
- Adjust the seat back until the back fits completely the seat back (for front passenger).
- Fasten the seat belt correctly. => See page 20
- Place both feet on the floor.
- Use appropriate child safety seat in accordance with applicable regulations for children. => See page 33

⚠ WARNING

- **It is forbidden to install a child safety seat in the front passenger's seat.**
- **If the front passenger is too close to the instrument panel, the SRS will not provide effective protection.**
- **When the vehicle is running, be sure to maintain a correct sitting posture and fasten the seat belt correctly, so as to avoid unexpected injuries in case of emergency braking or accidents.**

3.2 Seat belt

3.2.1 Why must you fasten the seat belt

Protection of the driver and passengers by seat belts

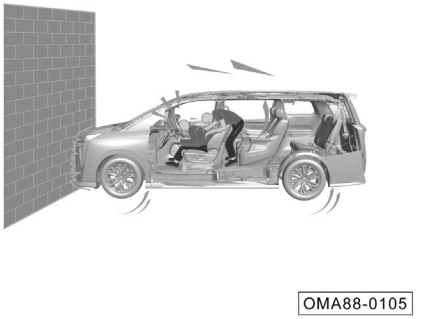
In the event of a vehicle collision, the seat belt, if fastened correctly, can restrain the driver and passengers in a proper position and slow down the inertia of their forward movement, thus preventing them from being thrown forward, and at the same time allow airbags to give them the best protection, thus reducing their impact injury as much as possible.

In the event of a collision, the seat belt will assist other safety systems in simultaneously absorbing the energy generated by the collision, further reducing the injuries suffered by the driver and passengers.

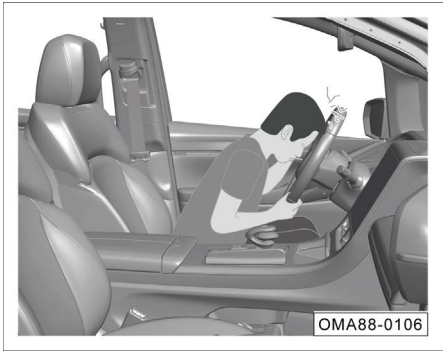
⚠ WARNING

Airbags cannot replace seat belts. Regardless of the availability of airbags, the seat belts should be fastened correctly.

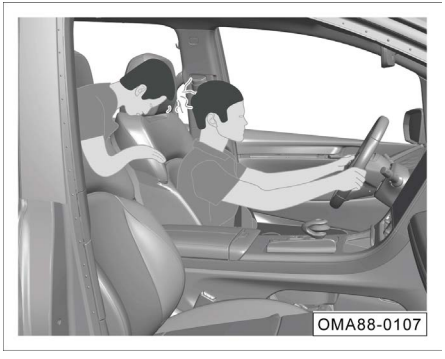
Consequences of not fastening the seat belt



In the event of a collision, the driver or passenger who does not fasten the seat belt will be thrown forward due to inertia and thereby injured.



Even if the vehicle speed is very low, the force acting on the human body in the event of a collision is so great that the occupant cannot control his or her body with hands at all. In that case, the occupant who does not fasten the seat belt will be thrown forward, and injured if colliding with any interior objects.



Rear passengers must also fasten the seat belts correctly, otherwise they will be thrown forward when an accident occurs. The passenger who does not fasten the seat belt will not only hurt himself or herself, but also endanger other occupants in the vehicle.

3.2.2 Seat belt

Seat belt indicator lamp

: Driver's seat belt indicator lamp

$_2$: Front passenger's seat belt indicator lamp

The following alarms will be triggered when the START/STOP button is set to "ON" position:

- If the driver or front passenger does not fasten the seat belt at a speed lower than 20km/h, the corresponding indicator lamp on the instrument cluster will flash and stay on, accompanied by an alarm message.
- If the driver or front passenger does not fasten the seat belt at a speed higher than or equal to 20km/h, the corresponding indicator lamp on the instrument cluster will flash for a few seconds and stay on, accompanied by an alarm message and a continuous audible alarm.

CAUTION

- Before driving, please check whether there are any heavy objects on the front passenger's seat to avoid the system mistakenly determining that the seat is occupied and issuing a false alarm.
- If the alarm remains on after the seat belt is fastened correctly, it means that the SRS is failed. In that case, please go to the GAC Motor authorized shop for inspection in time.

⚠ WARNING

Never insert the substitute of seat belt tongue into the buckle to eliminate the seat belt alarm.

: 2nd-row seat belt indicator lamp

If 2nd-row seat belt indicator lamp is on in white, it indicates that the seat belt is fastened, and if the indicator lamp is on in red, it indicates that the seat belt is not fastened or the SRS is faulty. If the indicator lamp stays red after the seat belt is fastened correctly, it means that the SRS is failed. In that case, please go to the GAC Motor authorized shop for inspection in time.

The 2nd-row seat belt indicator lamp is on for a period of time and then goes out. It will light up again under the following conditions:

- The 2nd-row passenger does not fasten the seat belt when the engine starts.
- The 2nd-row passenger does not fasten the seat belt when the rear door is opened/closed.
- The 2nd-row passenger fastens or unfastens the seat belt.

Seat belt pretensioner and load limiter *

The seat belt pretensioner and load limiter can reduce the pressure of the seat belt on the chest of the driver or passenger and improve the protection performance.

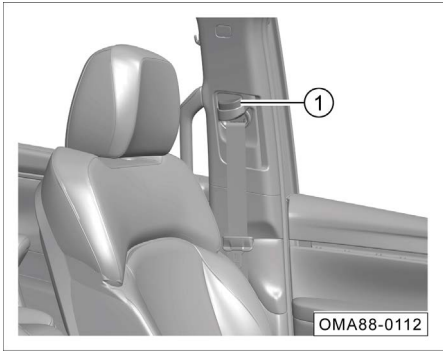
- Before the collision, the seat belt pretensioner and load limiter can restrain the driver or passenger and enable him or her to maintain a correct sitting posture to prevent the body from leaning forward.
- In the event of a severe collision where the triggering condition is reached, the seat belt pretensioner and load limiter will be triggered, driving the seat belt webbing to be quickly retracted and tensioned.

- When a vehicle collision occurs, the human body will move forward, and the seat belt load limiter will be activated at this time, so that the restraint force of the seat belt on the human body will be within a certain range, preventing the occupant from being further injured due to excessive force. And at the same time, the seat belt pretensioner and load limiter will work with the airbag to achieve a better safety protection performance.

NOTE

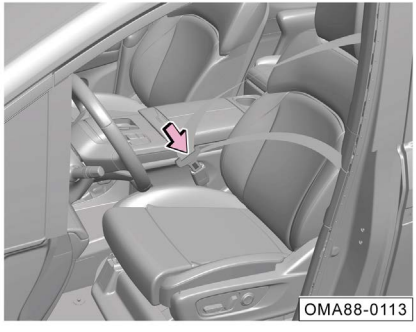
- When the seat belt pretensioner and load limiter is activated, a little harmless smoke together with a sound will be produced, which is normal.
- The seat belt pretensioner and load limiter cannot be used any more if deployed, and in this case, the SRS indicator lamp stays on, please contact the GAC Motor authorized shop for replacement.

Adjusting the front shoulder belt height



- Moving up: Grasp the guide and move it up to adjust the shoulder belt to the appropriate height.
- Moving down: Press the guide to unlock the switch ① and move it down to adjust the shoulder belt to the appropriate height.
- After the adjustment, move the guide to check whether it is firmly locked.

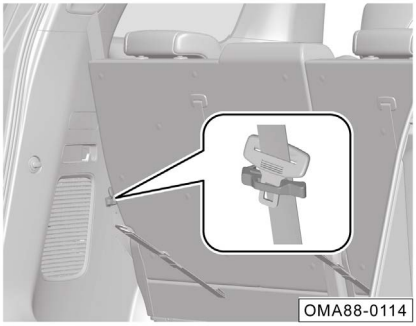
Fastening the front seat belt



- Keep a correct sitting posture. => See page 16
- Pull out the seat belt slowly at an uniform speed, insert the lock tongue into the corresponding buckle until a click sound is heard.
- Pull the seat belt and confirm that the lock tongue is properly locked.

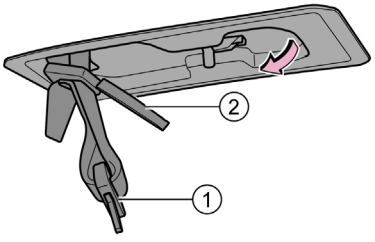
NOTE

Outboard rear seat belts are fastened in the same way, and the driver is responsible for reminding passengers to fasten the seat belts correctly.

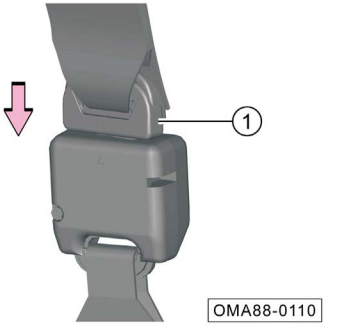


- When fastening the outboard 3rd-row seat belts, pull out the belt tongue from the trim panel clamp, then slide the seat belt webbing out from the clamp, pull the seat belt and fasten it, taking care not to damage the clamp.

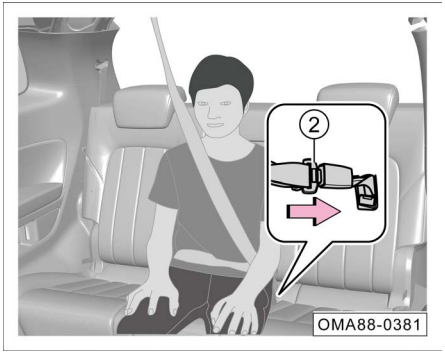
Fastening the middle 3rd-row seat belt



1. Pull the seat belt small tongue ① and tongue ② from the fixing slot on the roof.

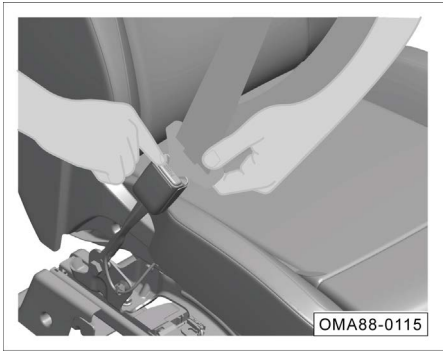


2. Align the small tongue ① with the triangular mark on the buckle. Make sure the seat belt is not twisted. Insert the seat belt small tongue ① into the buckle.



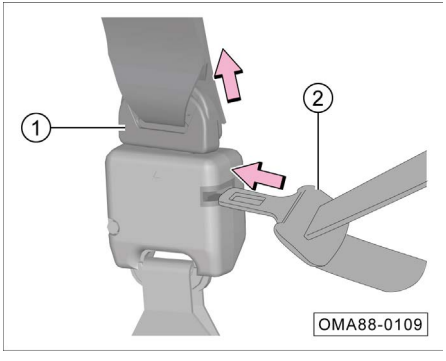
3. Insert the seat belt tongue ② into the buckle until a click is heard.
4. Pull the seat belt tongue and confirm that the tongue is properly locked.

Unfastening the seat belt



- Press the red button of the buckle. Then the lock tongue will pop out automatically.
- Grasp the seat belt to allow it to retract slowly.

Unfastening the middle 3rd-row seat belt



- Press the red button next to the buckle. Then the tongue ② will pop out automatically.
- Insert the seat belt tongue ② into the slot on the side of the buckle. Then the small tongue ① will pop out automatically.
- Grasp the seat belt to allow it to retract slowly.

Pregnant women must fasten the seat belts correctly

How does a pregnant woman correctly fasten the seat belt?

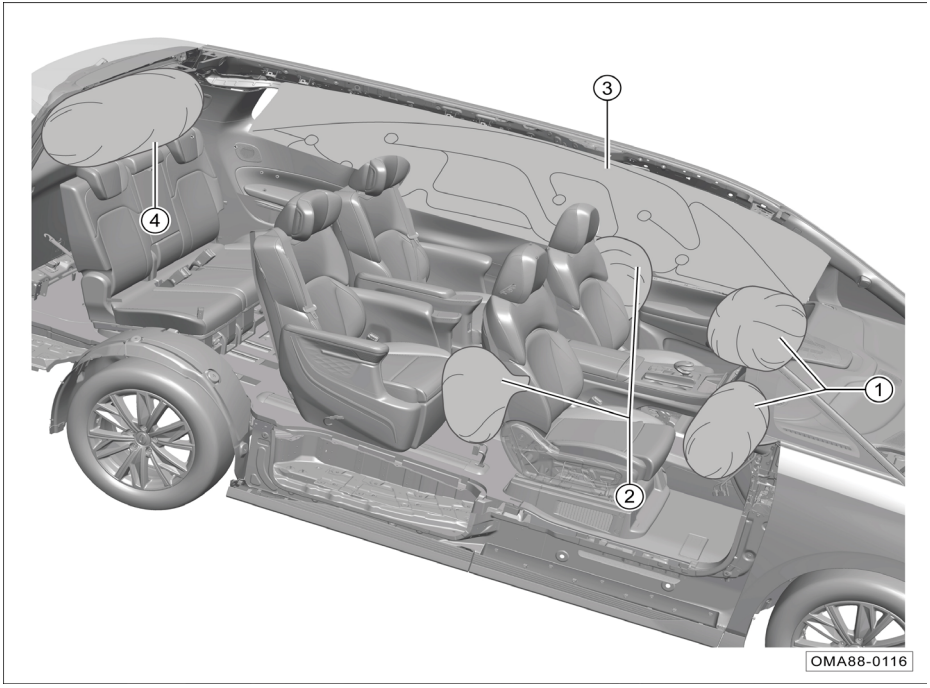
- Adjust the seat and head restraint to the proper position.
- Grasp the lock tongue, slowly pull the seat belt over the shoulder, and ensure that the lap belt is as low as possible and not pressed against the abdomen.
- Insert the tongue into the buckle till a buckling sound is heard.
- Pull the shoulder belt upward parallel to the upper body, tension the lap belt, and make sure that the lock tongue is properly locked.

⚠ WARNING

To reduce the risk of injury during emergency braking or accidents, please observe the following precautions:

- **Before driving, make sure that all occupants have properly fastened the seat belts.**
- **Each seat belt is for one person only. Do not share a seat belt with other persons (including children).**
- **Do not recline the front seat back excessively for comfort.**
- **Do not put the shoulder belt under or behind your arm.**
- **Be sure to insert the lock tongue into the buckle of corresponding side instead of the buckle of other side.**
- **Never unfasten the seat belt before the vehicle comes to a complete stop.**

3.3 Supplemental restraint system (SRS)



Depending on vehicle configurations, the deployment positions of the SRS are as shown below:

① Front seat frontal airbag

② Front seat side airbag.

③ Side curtain airbag (LH SHOWN, RH OPPOSITE).

④ Rear windshield airbag*.

i NOTE

The airbag will produce a little harmless smoke when deployed, which is normal.

Supplemental restraint system (SRS) indicator lamp

After the START/STOP button is set to “ON” position, the indicator lamp will be on for a few seconds and go out after the system completes self-test.

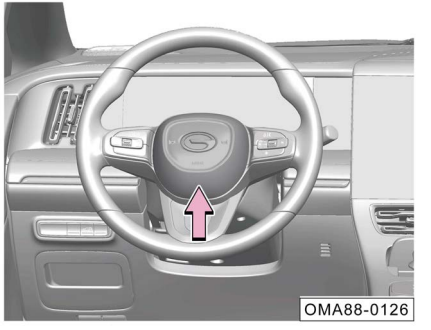
A system fault is indicated when the indicator lamp is in the following conditions:

1. After the START/STOP button is set to “ON” position, the indicator lamp does not come on.
2. After the START/STOP button is set to “ON” position, the indicator lamp does not go out after the system completes self-test.
3. After the START/STOP button is set to “ON” position, the indicator lamp goes out after the self-test, but then comes on again.
4. The indicator lamp comes on or flashes while the vehicle is running.

⚠ WARNING

- **Never attempt to repair, adjust or modify the airbag.**
- **The airbag can be deployed once only, and thus, if it is deployed in the event of an accident, please contact the GAC Motor authorized shop for replacement.**
- **When the SRS is faulty, please contact the GAC Motor authorized shop for inspection; otherwise the system will not trigger or abnormally trigger the airbag in the event of a collision.**

Front seat frontal airbag



The driver frontal airbag is installed inside the steering wheel (as indicated by the dotted dash) marked with “AIRBAG”.

The front passenger's frontal airbag is installed inside the instrument panel (as indicated by the dotted dash) marked with "AIRBAG".

In the event of a severe frontal collision where the triggering condition is met, the frontal airbags will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and front passenger.

In certain collision accidents, the system may simultaneously trigger other airbags.

⚠ WARNING

Do not attach or place any decorative objects on the surface of instrument panel, because when the vehicle is running or the airbag deploys, these objects will fall, be knocked over and roll around in the vehicle, affecting the driver's driving and hurting the passengers in the vehicle.

The front seat frontal airbags might not be triggered in the following cases:

- The START/STOP button is set to "ACC" or "OFF" position.
- Minor frontal collision.
- Side collision.
- Rear-end collision.
- Rollover.
- Other special circumstances.

i NOTE

The word "minor" refers to the extent with respect to the SRS controller and has nothing to do with the damage of the vehicle.

Front seat side airbag*

The front seat side airbags are installed in the outboard sides of the driver's seat back and the front passenger's seat back respectively (as indicated by the dotted dash) marked with "AIRBAG".

In the event of a severe side collision where the triggering condition is met, the side airbags on the side where the vehicle collides will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and front passenger.

In certain collision accidents, the system may simultaneously trigger other airbags.

The front seat side airbags might not be triggered in the following cases:

- The START/STOP button is set to "ACC" or "OFF" position.
- 100% frontal collision.
- Minor side collision.
- Rear-end collision.
- Other special circumstances.

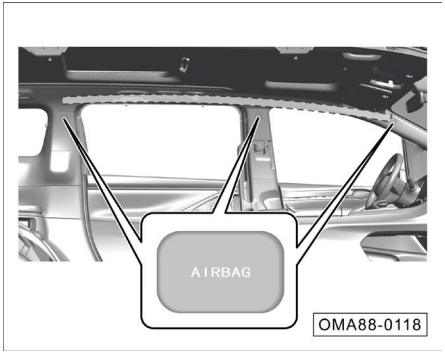
i NOTE

The word "minor" refers to the extent with respect to the SRS controller and has nothing to do with the damage of the vehicle.

⚠ WARNING

- **Observe the instructions on the warning label pasted on the side of the door. Do not lean your body against the door side equipped with side airbags during driving.**
- **Do not cover the side airbags with seat covers or other objects; otherwise, the side airbags will not be triggered to protect the occupants when an accident occurs.**

Side curtain airbag



The side curtain airbags are installed in the left and right sides of the roof respectively (as indicated by the dotted dash) marked with “AIRBAG”.

In the event of a severe side collision, the side curtain airbags on the side where the vehicle collides will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and passengers.

In certain collision accidents, the system may simultaneously trigger other airbags.

The side curtain airbags might not be triggered in the following cases:

- The START/STOP button is set to “ACC” or “OFF” position.
- 100% frontal collision.
- Minor side collision.
- Rear-end collision.
- Other special circumstances.

NOTE

The word “minor” refers to the extent with respect to the SRS controller and has nothing to do with the damage of the vehicle.

Rear windshield airbag

The rear windshield airbag is installed inside the rear roof (as indicated by the dotted dash) marked with “AIRBAG”.

In the event of a rear collision, the rear windshield airbag will be triggered by the system and deploy rapidly to assist the seat belt in protecting the driver and passengers.

In certain collision accidents, the system may simultaneously trigger other airbags.

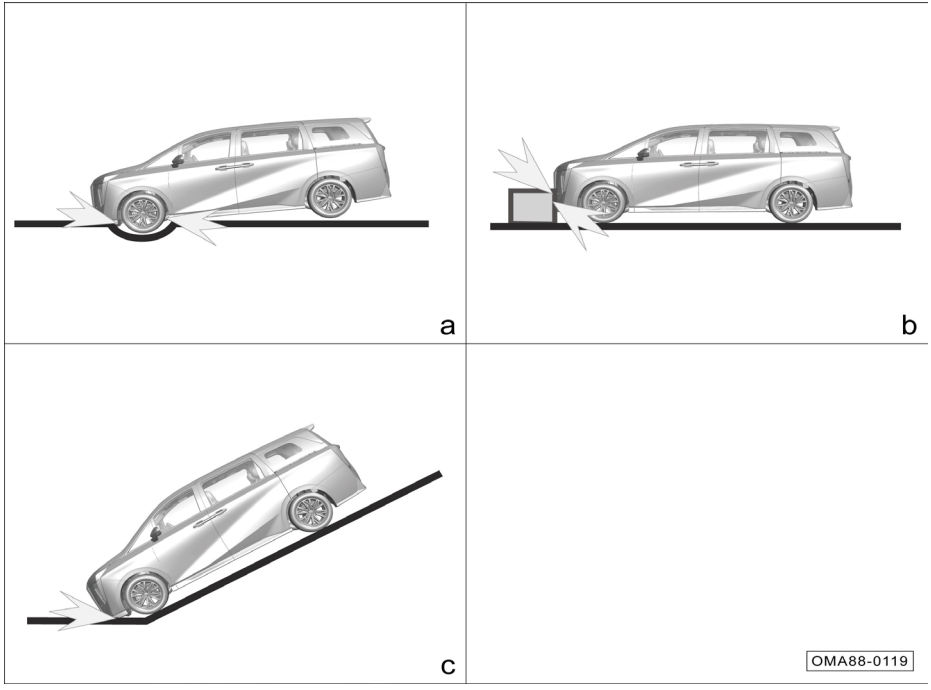
The rear windshield airbag might not be triggered in the following cases:

- The START/STOP button set to “ACC” or “OFF” position.
- 100% frontal collision.
- Side collision.
- Minor rear collision.
- Other special circumstances.

i NOTE

The word “minor” refers to the extent with respect to the SRS controller and has nothing to do with the damage of the vehicle.

3.3.1 Cases where the airbags may deploy

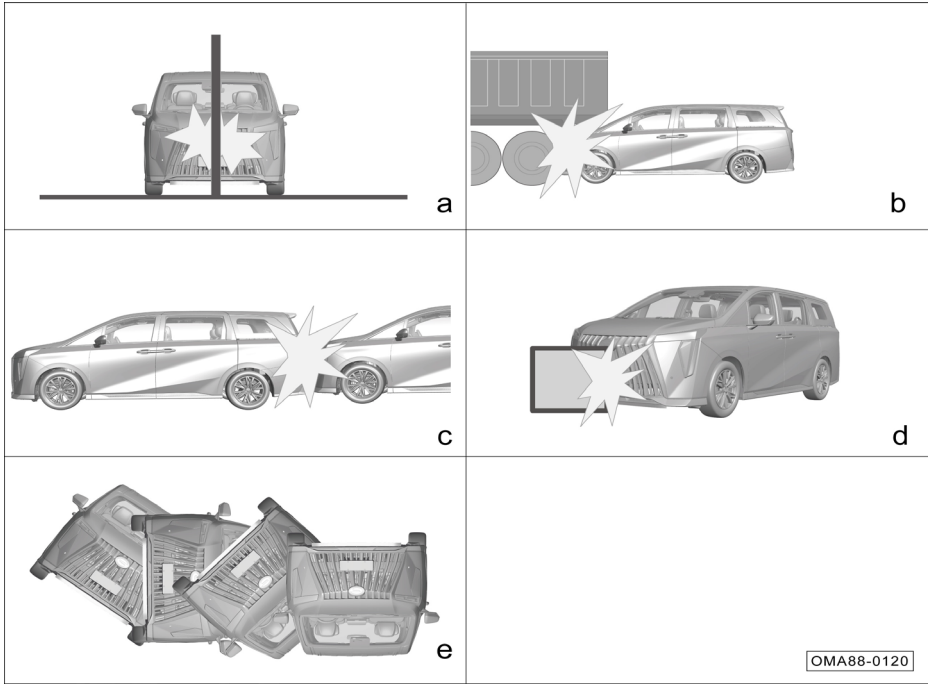


a. Nose-down to the ground when the vehicle crosses a deep groove.

b. Collision with roadside protrusions, curbs, etc.

c. Nose-down to the ground when the vehicle runs down a steep slope.

3.3.2 Cases where the airbags might not deploy



a. Collision with concrete pillars, trees or other elongated objects.

b: Rear-end collision with the lower rear end of large truck.

c: Rear-end collision by other vehicles.

d: Collision with a wall or another vehicle, other than frontal collision.

e: Rollover or tilting.

3.4 Safe ride of children

3.4.1 General description

The child must sit in a 2nd-row seat or left 3rd seat, and a suitable child safety seat should be selected for protection according to the body size of the child.

Warning labels are pasted on the front and back of the right sun visor to remind the front passenger of the danger of frontal airbag. Be sure to read and follow the instructions on the labels.

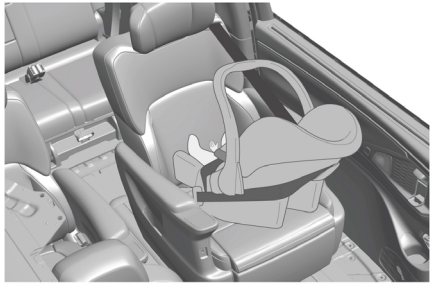
⚠ WARNING

- **Do not install any rear-facing child safety seats on seats with frontal airbags!**
- **Even if the child has been put in a child safety seat, do not let the head or any part of the body rest on the door area (the deployment area of the front seat side airbag or side curtain airbag); otherwise the impact force of the deployed front seat side airbag or side curtain airbag can cause serious injury or even death of the child.**
- **Do not let children stand or kneel on the seat.**
- **Do not allow children to operate devices that may cause pinch to themselves (such as power window, sunroof, etc.).**

⚠ WARNING

- **Never leave children alone in the vehicle!**
- **Never hold infants or toddlers on your knees!**
- **Seat belts are not suitable for infants and toddlers as they can cause injuries in the event of an accident.**
- **Ensure that in the event of a collision or emergency braking, children are less likely to be injured by hitting any hard objects in the vehicle.**
- **Lock the child safety lock of the door on the side where the child sits.**

3.4.2 Child safety seat



a. Group 0/0+ child safety seats

Group I child safety seat

c. Group II child safety seats

d. Group III child safety seats OMA88-0131

Classification of child safety seats (for reference only):

a. Group 0/0+ child safety seats

- Suitable for infants weighing less than 13kg.

b. Group I child safety seats:

- Suitable for toddlers weighing between 9kg and 18kg. For children weighing up to 18 kg (3 years old), rear-facing child safety seats must be installed.

c. Group II child safety seats:

- Suitable for children weighing between 15kg and 25kg.

d. Group III child safety seats:

- Suitable for children weighing between 22kg and 36kg.

Welldon Angela 2nd Generation is recommended for Group I child safety seat, and the product model is WD002–ZJC.

Precautions for installation:

- Adjustment of the 2nd-row seat: Adjust the seat longitudinally to the rearmost position.
- Adjustment of seat body: Rear-facing seat is required. Adjust the seat body to make it most upright (nearly vertical).
- Adjustment of headrest: The headrest of the child safety seat must be flush with the shoulder of the child.
- The top tether hook must be fixed to the 2nd row seat back.
- Take the path of top tether around both sides of the child safety seat headrest.
- The clip gasket and shoulder belt jacket must be used.

i NOTE

During the actual installation of the child safety seat, be sure to refer to the instruction of the child safety seat for correct installation.

3.4.3 Information about child safety seat

Information about the applicability of different seating positions for child restraint systems:

Weight group	Mounting position			
	Front passenger's seat	2nd-row seat	3rd-row left seat	3rd-row right and middle seats
Group 0: <10kg	X	U	U	X
Group 0+: <13kg	X	U/UF	U/UF	X
Group I: 9~18kg	X	U/UF/L	U/UF/L	X
Group II: 15~25kg	X	UF	UF	X
Group III: 22~36kg	X	UF	UF	X

Note: **The uppercase letters in the table are defined as follows:**

U = Suitable for universal category child restraint system approved for this weight group.

UF = Suitable for forward-facing universal category child restraint system approved for this weight group.

L = Suitable for the listed special ISOFIX child restraint systems, which may be for special vehicles, or of restricted or semi-general categories.

X = Not suitable for child restraint system of this weight group

For some child safety seats, a size class is specified. Be sure to check the size class according to the manufacturer's instructions, packaging, and child safety seat label. For guidance on proper installation, please refer to the instruction of the child safety seat.

The right and middle 3rd-row seats do not allow for any child safety seats.

ISOFIX mounting positions for ISOFIX child safety seats

Weight group	Size class	Fixture module	Mounting position			
			Front passenger's seat	2nd-row seat	3rd-row left seat	3rd-row right and middle seats
Carry-cot	F	ISO/L1	X	X	X	X
	G	ISO/L2	X	X	X	X
Group 0: <10kg	E	ISO/R1	X	IUF/IL	IUF/IL	X
Group 0+: <13kg	E	ISO/R1	X	IUF/IL	IUF/IL	X
	D	ISO/R2	X	IUF/IL	IUF/IL	X
	C	ISO/R3	X	IUF/IL	IUF/IL	X
Group I: 9~18kg	D	ISO/R2	X	IUF/IL	IUF/IL	X
	C	ISO/R3	X	IUF/IL	IUF/IL	X
	B	ISO/F2	X	IUF/IL	IUF/IL	X
	B1	ISO/F2X	X	IUF/IL	IUF/IL	X
	A	ISO/F3	X	IUF/IL	IUF/IL	X
Group II: 15~25kg	—	—	X	IUF	IUF	X
Group III: 22~36kg	—	—	X	IUF	IUF	X

Note: **The uppercase letters in the table are defined as follows:**

IUF - Suitable for "forward-facing" general ISOFIX child safety seats for this weight group that are fixed with top tether.

IL - Suitable for the listed special ISOFIX child restraint systems, which may be for special vehicles, or of restricted or semi-general categories.

X - Not suitable for the child safety seats for this weight group.

For some child safety seats, a size class is specified. Be sure to check the size class according to the manufacturer's instructions, packaging, and child safety seat label. For guidance on proper installation, please refer to the instruction of the child safety seat.

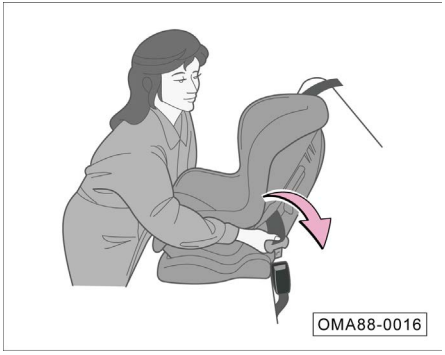
3.4.4 Correct installation of child safety seat

To ensure a better protection effect and prevent the headrest from affecting the performance of the child safety seat during use, it is recommended to remove the headrest of the seat on which the child safety seat is installed.

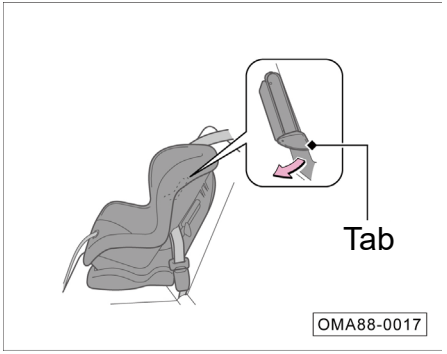
NOTE

During the actual installation of the child safety seat, be sure to refer to the instruction of the child safety seat for correct installation.

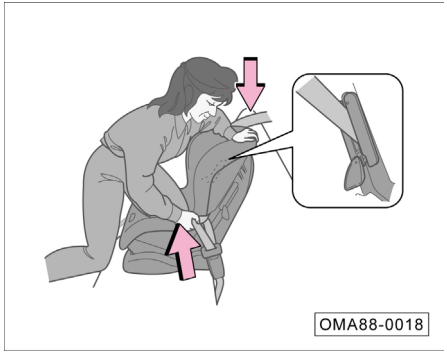
Installation of child safety seat by three-point seat belt



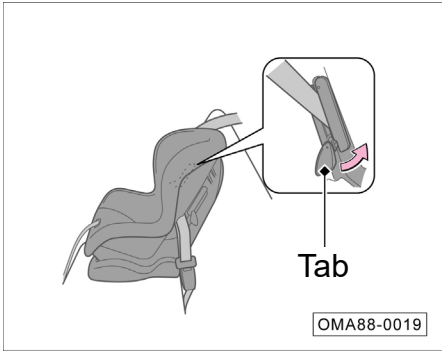
1. Place the child safety seat on the rear seat.
2. Pass the seat belt through the child safety seat and fully insert the tongue into the buckle until a click sound is heard.



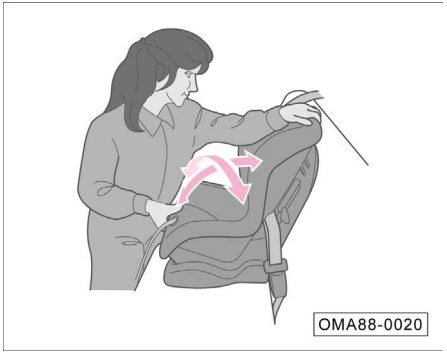
3. Push the tab down and pass the shoulder belt through the slit on the side of the child safety seat.



4. Grasp the shoulder belt near the buckle and pull it up to tension the lap belt. At this time, press the child safety seat with your own weight and push it into the vehicle seat.

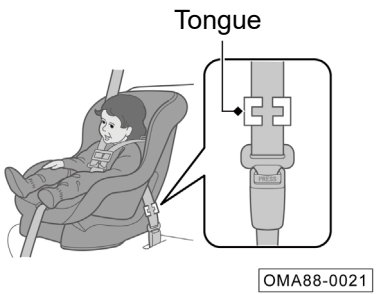


5. Place the seat belt correctly and push the tab up. Make sure the seat belt is not twisted. When pushing the tab up, pull upward the upper part of the shoulder belt to tension the belt.



6. Shake the child safety seat back and forth, left and right to make sure it is firmly fixed.

7. Make sure that all unused seat belts in the reach of the children are locked.



If no means are provided on the child safety seat for securing the seat belt, please install a tongue on the seat belt.

- After the above steps 1 and 2, pull up the shoulder belt and make sure the lap belt is tensioned.
- Firmly grasp the seat belt near the tongue. Pinch the two parts of the seat belt together so that they do not slip out of the tongue. Unbuckle the seat belt.

Install the buckle as shown. Place the buckle as close as possible to the tongue and insert the tongue into the buckle. Go to steps 6 and 7.

Installing ISOFIX system

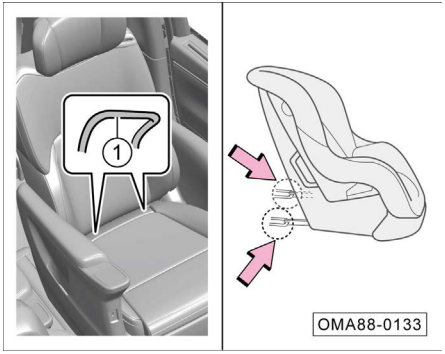
The 2nd-row seats of this vehicle is equipped with ISOFIX system. The left 3rd-row seat of some models is also equipped with ISOFIX system. The installation instructions of the child safety seat with ISOFIX system are described below.

⚠ WARNING

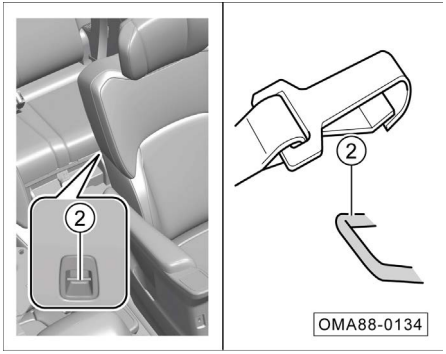
- **The child safety seat anchorages installed in this vehicle can be used to fix the child safety seats only.**
- **Do not connect straps, hard and sharp objects or any other objects other than child safety seats to the anchorages; otherwise children may be endangered in the event of an accident.**

The lower anchorage ① of the 2nd-row seat is hidden in the gap between the seat back and cushion; the upper anchorage ② is directly at the rear of the seat back.

The anchorage ① of the 3rd-row seat is hidden in the gap between the seat back and cushion.



1. Put the child safety seat on the seat, find the lower anchorage ①, and insert the lower guide groove of the child safety seat as arrowed into the lower anchorage ① until a click sound is heard.



2. Thread the strap through the top of seat back and attach the strap hook to the top anchorage ② with the strap not twisted.
3. Tension the strap and shake the child safety seat to ensure it is firmly fixed.

3.5 Exhaust gas hazard

Carbon monoxide gas

The exhaust gas emitted by the engine contains the toxic carbon monoxide gas. Please use the vehicle correctly to prevent the carbon monoxide gas from entering the vehicle.

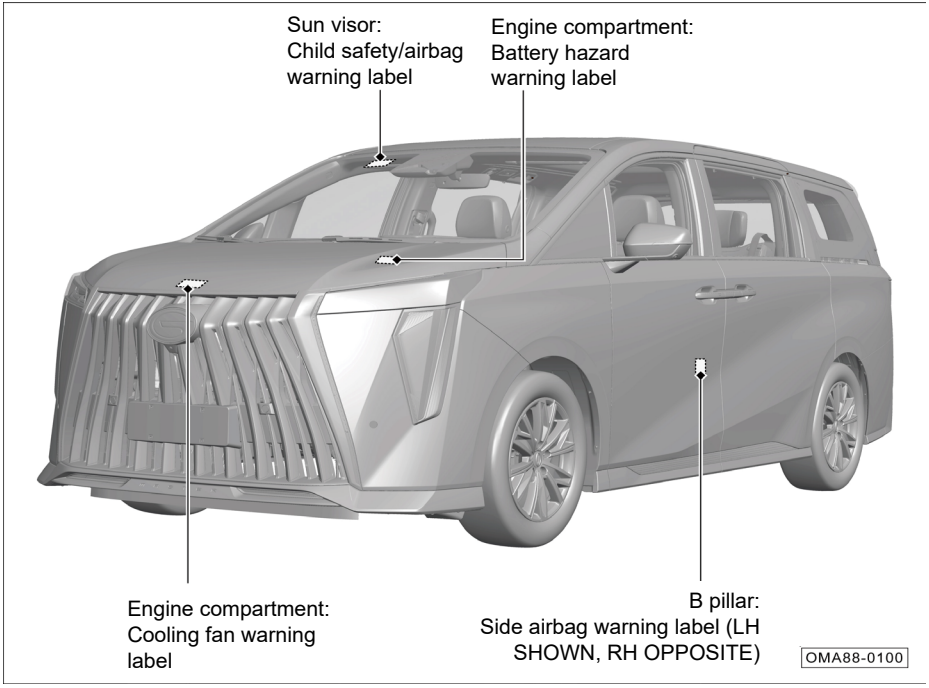
Please contact the GAC Motor authorized shop to check whether the exhaust system is normal in the following cases:

- The exhaust system makes abnormal noises.
- The exhaust color is abnormal.

⚠ WARNING

- **Carbon monoxide gas is toxic, and inhaling a great quantity of it will cause loss of consciousness and even death.**
- **When the engine is started for a long time in a confined space (such as a garage, etc.), carbon monoxide will quickly accumulate, resulting in excessive carbon monoxide in the vehicle. After starting the engine, drive the vehicle away from the confined space immediately.**

3.6 Safety label



The labels are located as shown to remind you of the potential danger that can cause serious injury or death. Please read these labels carefully.

If the label comes off or is difficult to read, please go to the GAC Motor authorized shop in time for replacement.

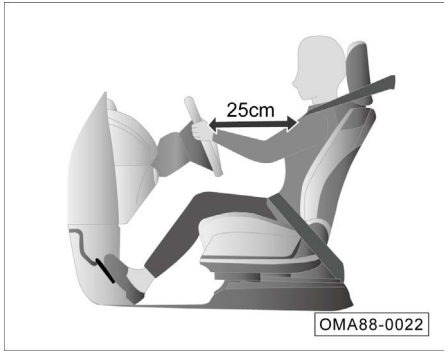
i NOTE

In case of any discrepancy in the illustrated location or quantity of the labels, the actual vehicle shall prevail.

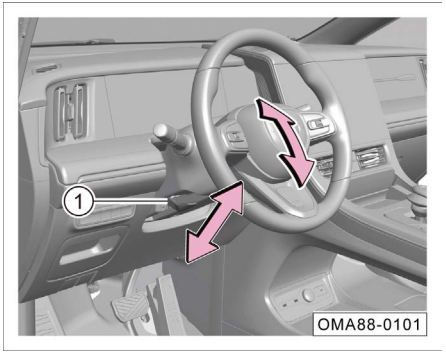
4.1 Cab

4.1.1 Steering wheel

Adjustment of the steering wheel position



- Adjust the driver's seat to a suitable position, so that the distance between the steering wheel and your chest is not less than 25cm.

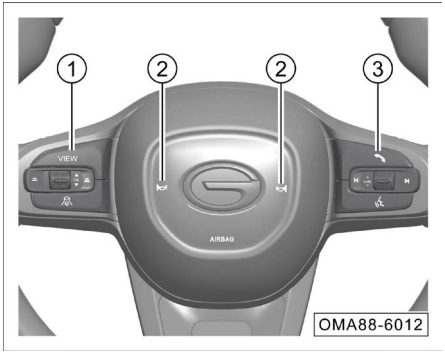


- Push down the locking handle ① to unlock the steering wheel.
- Adjust the steering wheel to the appropriate position up, down, front, and back as required, so that you can see the instrument panel and all indicator lamps.
- Pull up the locking handle ① to lock the steering wheel and make sure it is firmly locked.

⚠ WARNING

- **During driving, the driver's hands should always grasp the outer ring of the steering wheel (9 o'clock and 3 o'clock positions).**
- **After adjustment, the steering wheel must be locked to prevent shifting while the vehicle is running.**
- **Only when the vehicle is stopped can the steering wheel be adjusted to avoid traffic accidents.**
- **To ensure safety, the steering wheel should face your chest, otherwise the airbag cannot provide effective protection in the event of an accident.**

Buttons on steering wheel*



① The left buttons include the control buttons of the instrument cluster display and the cruise control buttons:

- Control buttons of the instrument cluster display:
  - Driving information => See page 48
  - Instrument cluster theme switching => See page 48
  - Alarm message => See page 51
- Cruise control button:
  - ACC button => See page 177
  - Integrated cruise control button => See page 186

② Horn button: Press button to sound the horn; release the button to stop sounding the horn.

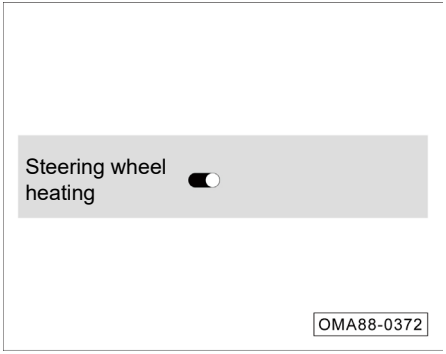
⚠ WARNING

Do not press and hold the button for a long time; otherwise the horn is highly prone to be damaged.

③ The right buttons include the control buttons of AV system:

- AV system control button => See page 148

Steering wheel heating



With the START/STOP button in “ON” position, set the steering wheel heating function to ON/OFF via the AV system display.

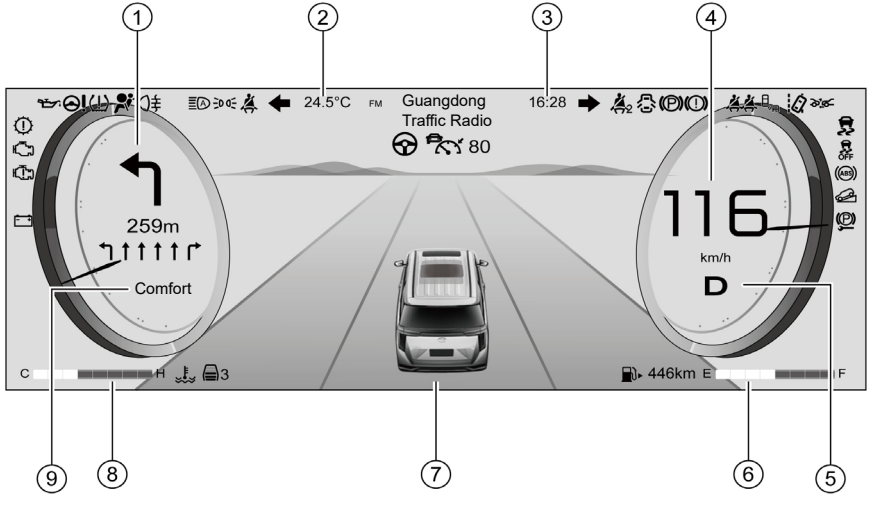
CAUTION

After the steering wheel heating function is activated, if no temperature change or heating is felt within a long period of time, please immediately deactivate the function and go to the GAC Motor authorized shop for inspection in time.

WARNING

If your sensitivity to pain and temperature is poor, do not activate the steering wheel heating function to avoid possible burns of your hands by the heater.

4.1.2 Instrument cluster



Instrument cluster with 12.3-inch display (Intelligent driving theme)

① Left display of instrument panel
② Outside temperature indication
③ Time display
④ Speedometer
⑤ Gear display
⑥ Fuel gauge
⑦ Center display of instrument panel
⑧ Engine coolant temperature gauge
⑨ Driving mode

NOTE

The instrument cluster features multiple themes, including “Organic theme”, “AVDC theme” and “Intelligent driving theme”. The intelligent driving theme is illustrated here, but it is for reference only.

Tachometer

The tachometer is used to indicate the current engine speed, in 1,000 r/min.

CAUTION

The area of 6000~8000 r/min represents the high load area of the vehicle. Avoid running the vehicle with the pointer of the tachometer within this area; otherwise, fuel shut-off and loss of power will occur due to self-protection of the engine.

Speedometer

The speedometer indicates the current speed of the vehicle in km/h, in the range of 0~240 km/h.

WARNING

For driving safety, please strictly abide by the traffic rules, and never speed the vehicle.

Engine coolant temperature gauge

The engine coolant temperature gauge is used to indicate the current temperature of the engine coolant.

After the engine is started, the corresponding scale divisions of the coolant temperature gauge will be illuminated according to different temperatures, and the engine operating temperature will vary depending on the ambient temperature and engine load.

- Conditions where the gauge indicates high coolant temperature: prolonged climbing in hot weather; deceleration or stop after driving at a high speed; in areas with heavy traffic, where the HVAC system is turned on and the engine idles for a long time; towing, etc.
- Conditions where the gauge indicates low coolant temperature: insufficient warm-up after cold start in cold weather; running with maximum heating in cold weather, etc.

Fuel gauge

The fuel gauge is used to indicate the current amount of fuel remaining in the fuel tank.

- The indication range is E~F, where “E” means the fuel tank is empty, and “F” means the fuel tank is full. The corresponding scale divisions are illuminated according to the remaining fuel in the fuel tank.
- When no scale division is illuminated or only the first scale division is illuminated, it means that the fuel in the fuel tank is insufficient. In that case, the yellow indicator lamp on the instrument cluster will flash, accompanied by the alarm message “Add fuel”, reminding the driver that there is not enough fuel and fuel should be added as soon as possible.

Gear display information

- The current gear information of the vehicle such as “P”, “R”, “N” or “D” is displayed according to the received signal.

Driving mode

- The current driving mode of the vehicle is displayed according to the received signal.

Outside temperature indication

- The current outside temperature is displayed.

Odometer

- The odometer indicates the traveled distance of the vehicle in the driving information screen.
- The indication range is 0~999999 km.

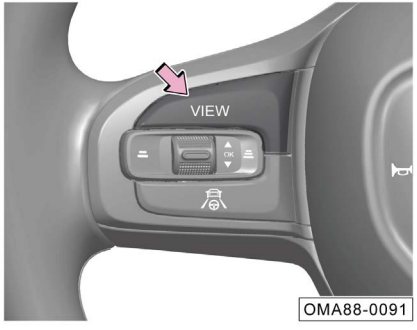
Instrument cluster display

The displayed information includes: driving information, vehicle state, G value graph, throttle sensitivity, fuel consumption trend, ADAS, alarm center, AV and entertainment information.

CAUTION

- The protection function of the instrument cluster may be triggered under high temperature conditions to dim the brightness of the display. The brightness can be restored after the temperature of the vehicle is lowered. This is a normal phenomenon.
- If the instrument cluster display is abnormal (such as black/white screen, flickering/dots), stop the vehicle immediately for the sake of safety, and contact the GAC Motor authorized shop for inspection.

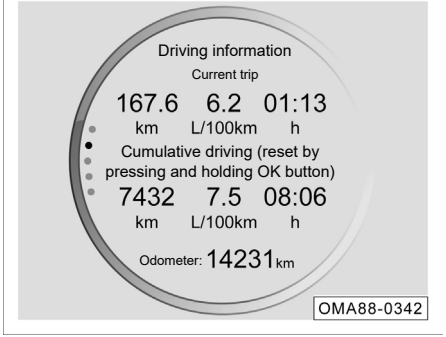
Instrument cluster theme switching



With the START/STOP button in “ON” position, press “VIEW” button on the left of steering wheel to switch instrument panel theme.

- You can switch among the Organic theme, the AVDC theme by pressing the “VIEW” button. Only when ACC/ICA is activated will you automatically jump to the Intelligent driving theme. In other cases, you cannot switch to the Intelligent driving theme by pressing the “VIEW” button.
- When ACC/ICA is activated, you cannot switch from the Intelligent driving theme to other theme by pressing the “VIEW” button.

Driving information

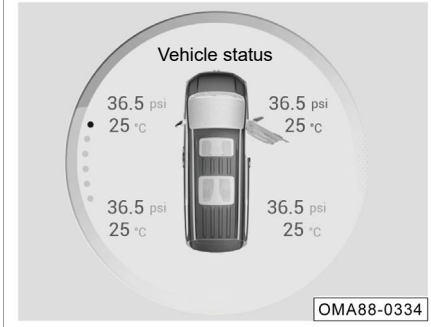


With the START/STOP button in “ON” position, the information can be viewed by moving up or down the “OK” button on the left of the steering wheel after the Organic theme is applied.

- On the driving information screen, the current trip information, cumulative driving information and total distance are displayed.
- Current trip: It indicates the driving information (trip distance/ average fuel consumption/ driving time) of the vehicle in a single drive after the START/STOP button is set to “ON” position, where the vehicle parameters cannot be reset.

- Cumulative driving: It indicates the driving information (cumulative distance/ average fuel consumption/ driving time) of the vehicle since the last reset, where the vehicle parameters can be reset by pressing and holding “OK” button.
- Total distance: It indicates the mileage of the vehicle, which cannot be reset.

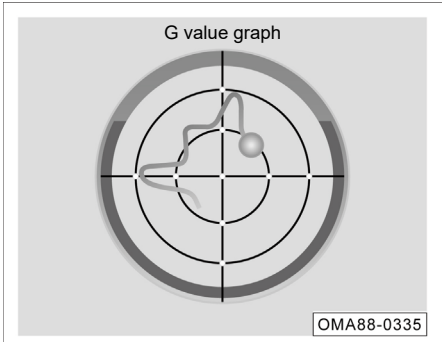
Vehicle status



With the START/STOP button in “ON” position, the information can be viewed by moving up or down the “OK” button on the left of the steering wheel after the Organic theme is applied.

- The displayed information includes tire pressure, temperature, door state, and seat belt alarm message.
- When tire pressure is abnormal, any door/ liftgate/engine hood is ajar or any seat belt is unfastened, the screen will pop out automatically.

G value graph



With the START/STOP button in “ON” position, the information can be viewed after the AVDC theme is applied.

- When navigation information is displayed, the G value graph will zoom out.

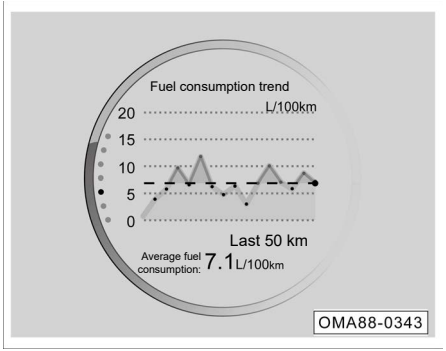
Throttle sensitivity

- The displayed information includes current throttle sensitivity, accelerator pedal position and brake pedal position.
- The left semicircle represents brake pedal position, and the right semicircle represents accelerator pedal position.

i NOTE

- Press “OK” button on the left of the steering wheel to access the setting screen. The throttle sensitivity is in 5 levels, which can be adjusted by moving up or down the “OK” button (except in Intelligent driving theme).
- The AVDC theme is illustrated here and for reference only. Please refer to the actual vehicle.

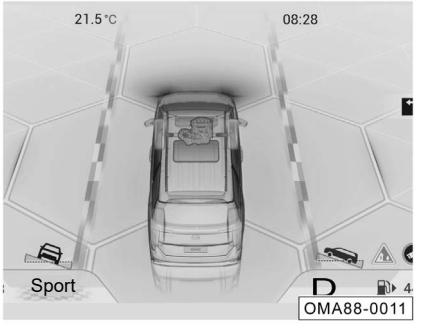
Fuel consumption trend



With the START/STOP button in “ON” position, the information can be viewed by moving up or down the “OK” button on the left of the steering wheel after the Organic theme is applied.

- The fuel consumption trend for the last 50km and the average fuel consumption are displayed.

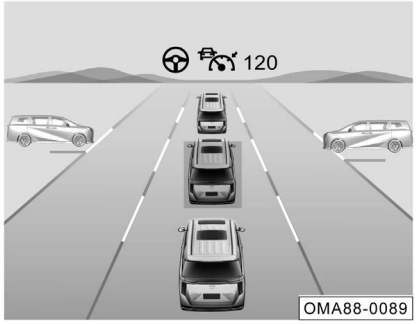
Vehicle energy flow information



With the START/STOP button in “ON” position, the information can be viewed by moving up or down the “OK” button on the left of the steering wheel after the AVDC theme is applied.

- The information displayed include lighting status, engine status, energy flow status, body tilt status, uphill, downhill and slope status.

ADAS

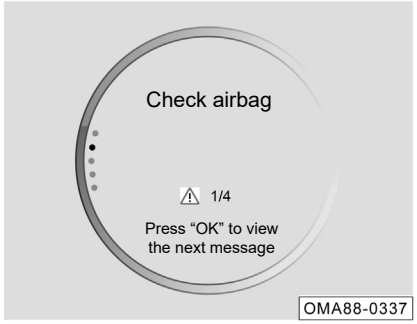


When ADAS is activated, the corresponding ADAS information, including ego vehicle, left and right lane markings, LDW, FCM, RCTA*, will be displayed.

NOTE

The Intelligent driving theme is illustrated here and for reference only. Please refer to the actual vehicle.

Alarm center



On the alarm center screen, the current state of the vehicle is displayed in the form of texts or pictures. The driver should always pay attention to checking for alarm message.

- If the vehicle is in normal condition, no alarm message is displayed.
- If the vehicle is faulty or certain function is activated/deactivated, corresponding text or picture message will appear at the upper part of the screen of the instrument cluster, reminding the driver about the current state of the vehicle.

- If any alarm message appears, press “OK” button on the left of the steering wheel to confirm the message. Then the message will be displayed on the alarm center screen.
- In case of several alarm messages, corresponding number and current text message will be displayed on the alarm center screen.

NOTE

The Organic theme is illustrated here and for reference only. Please refer to the actual vehicle.

AV and entertainment information

- When the AV system is turned on, the current playback information will be displayed on the AV and entertainment information screen.

NOTE

The Organic theme is illustrated here and for reference only. Please refer to the actual vehicle.

Instrument cluster setting

With the START/STOP button in “ON” position and the vehicle stationary, the instrument cluster can be set via the AV system display.

4.1.3 Indicator lamp

No.	Icon	Designation	Color	Function
1		Charging system warning lamp	Red	If the red warning lamp comes on, it indicates that the charging system is faulty.
2		MIL	Yellow	If the yellow indicator lamp comes on, it indicates that the engine system is faulty.
3		Low oil pressure warning lamp	Red	If the red warning lamp comes on, it indicates that the engine oil pressure is low.
4		Emission fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the exhaust system is faulty.
5		Left turn signal indicator lamp and hazard warning lamp	Green	When the left turn signal indicator lamp flashes alone, it indicates that the left turn signal lamp of the vehicle is on. When the hazard warning lamp switch is pressed, the left/right turn signal indicator lamps and all turn signal lamps will flash simultaneously.
6		LDW status indicator lamp	White	If the white indicator lamp comes on, it indicates that the LDW is activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that the LDW is faulty. In that case, please go to the GAC Motor authorized shop for inspection in time.
			Blue	If the blue indicator lamp comes on, it indicates that the LDW system is working normally or intervenes with the steering wheel for deviation correction.
7		FCW status indicator lamp	Red	If the red indicator lamp flashes, it indicates that the FCW is being triggered and activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that the FCW is faulty. In that case, please go to the GAC Motor authorized shop for inspection in time.
8		BSD status indicator lamp *	Green	If the green indicator lamp comes on, it indicates that the BSD is activated.
			Yellow	When the indicator lamp is yellow, it indicates that the BSD is faulty.
9		High engine coolant temperature indicator lamp	Red	If the red indicator lamp comes on, it indicates that the engine coolant temperature is too high.
10		Supplemental restraint system (SRS) indicator lamp	Red	If the red indicator lamp comes on, it indicates that the SRS is faulty.

No.	Icon	Designation	Color	Function
11		Low fuel level indicator lamp	Yellow	If the yellow indicator lamp flashes, it indicates that the fuel level of the fuel tank is low.
				If the yellow indicator lamp comes on, it indicates that the fuel pump level sensor circuit is faulty.
12		ACC indicator lamp (no vehicle ahead)	Gray	If the gray indicator lamp comes on, it indicates that the ACC is in the ready state, and there is no target vehicle ahead.
			Blue	If the blue indicator lamp comes on, it indicates that the ACC is working, and there is no target vehicle ahead.
13		ACC indicator lamp (a vehicle ahead)	Gray	If the gray indicator lamp comes on, it indicates that the ACC is in the ready state, and there is a target vehicle ahead.
			Blue	If the blue indicator lamp comes on, it indicates that the ACC is working, and there is a target vehicle ahead.
14		ACC fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ACC is faulty.
15		Right turn signal indicator lamp and hazard warning lamp	Green	If the right turn signal indicator lamp flashes alone, it indicates that the right turn signal lamp of the vehicle is on. When the hazard warning lamp switch is pressed, the left/right turn signal indicator lamps and all turn signal lamps will flash simultaneously.
16		EPB status indicator lamp	Red	If the red indicator lamp comes on, it indicates that the EPB is applied.
				If the red indicator lamp flashes, it indicates that the EPB is engaged partially or faulty.
			Green	If the green indicator lamp comes on, it indicates that the EPB is activated.
17		EPB fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the EPB is faulty.
				If the yellow indicator lamp flashes, it indicates that the EPB is in the service mode.
18		Parking brake and brake system indicator lamp	Red	If the red indicator lamp comes on, it indicates that the brake fluid level is too low or the electronic brake force distribution (EBD) system is faulty.
19		ESP indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ESP is faulty.
				If the yellow indicator lamp flashes, it indicates that the ESP is working.

No.	Icon	Designation	Color	Function
20		ESP OFF indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ESP is off.
21		Anti-lock braking system (ABS) indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ABS is faulty.
22		Transmission fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the transmission system is faulty. If the yellow indicator lamp flashes, it indicates that the transmission fluid temperature is high.
23		Tire pressure monitoring system (TPMS) indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the TPMS is faulty.
24		Electric power steering (EPS) indicator lamp	Red	If the red indicator lamp comes on, it indicates that the EPS is faulty.
25		Front passenger seat belt indicator lamp	Red	If the red indicator lamp comes on, it indicates that the front passenger seat belt is not fastened or the system is faulty.
26		Driver seat belt indicator lamp	Red	If the red indicator lamp comes on, it indicates that the driver seat belt is not fastened or the seat belt system is faulty.
27		High beam indicator lamp	Blue	If the blue indicator lamp comes on, it indicates that the high beam is on.
28		Position lamp indicator lamp	Green	If the green indicator lamp comes on, it indicates that the position lamp, instrument panel lamp, license plate lamp, ambient light, etc. are on
29		Rear fog lamp indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the rear fog lamp is on.
30		ADB indicator lamp	White	If the white indicator lamp comes on, it indicates that the ADB is in standby state.
			Blue	If the blue indicator lamp comes on, it indicates that the ADB is activated.
31		Hill descent control (HDC) indicator lamp	Yellow	If the yellow indicator lamp comes, it indicates that the HDC is activated.

No.	Icon	Designation	Color	Function
32		Hands-on indicator lamp	Blue	If the blue indicator lamp comes on, it indicates that hands on steering wheel is detected by ICA.
			Red	If the red indicator lamp comes on, it indicates that hands off steering wheel is detected by ICA.
33		ICA status indicator lamp	Gray	If the gray indicator lamp comes on, it indicates that ICA is in standby state.
			Blue	If the blue indicator lamp comes on, it indicates that ICA is activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that ICA is faulty.
34		Door ajar indicator lamp	Red	If the indicator lamp is on in red, it indicates that the engine hood, any door or trunk lid has not been closed.
35		2nd-row seat belt indicator lamp	White	If the white indicator lamp comes on, it indicates that the corresponding rear seat belt is fastened.
			Red	If the red indicator lamp comes on, it indicates that the corresponding rear seat belt is not fastened or the seat belt system is faulty.
36		Gasoline particulate filter (GPF) indicator lamp	White	If the white indicator lamp comes on, it indicates that the accumulated carbon of the GPF exceeds a certain limit, and it is necessary to run at a high speed for more than 40 minutes to clean the carbon.
			Yellow	If the yellow indicator lamp comes on, it indicates that the accumulated carbon of the GPF is excessive, and it is necessary to run at a high speed for more than 40 minutes to clean the carbon.

Note: Self-test will be carried out when the vehicle starts, and some warning or indicator lamps in the instrument cluster will be on for a short time and then automatically go out. If any warning or indicator lamp on the instrument cluster stays on after starting, it indicates that the related system or function is in a certain working state or faulty. Therefore, you should read carefully and understand the meaning of each indicator or warning lamp. In case of a fault, please visit or contact the GAC Motor authorized shop for inspection in time.

4.2 Vehicle locking and unlocking

4.2.1 Remote control key

This vehicle is accompanied with two intelligent remote control keys (including emergency mechanical key) and the corresponding key barcodes. If the key needs to be re-customized, please inform the GAC Motor authorized shop of the key barcode. If the key barcode is missing, please inform the GAC Motor authorized shop of the VIN.

NOTE

After the engine is started, do not place the remote control key on the instrument panel under the front windshield, otherwise the prompt “No key detected” may appear.

Poor signal strength of remote control key

The operation of the remote control key button may be interfered or unstable in the following cases:

- Nearby equipment is emitting strong radio waves.
- The remote control key is carried together with telecommunication equipment, laptop, mobile phone, access control card or wireless signal transmitter.
- The remote control key is put together with magnetic cards (such as bank card and bus card).
- Metal objects contact or cover the remote control key.

CAUTION

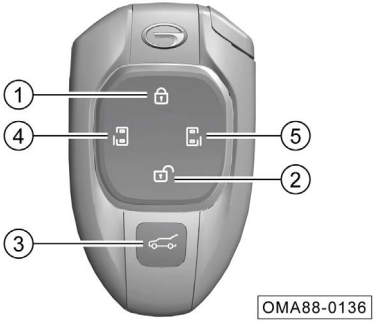
The remote control key contains an electronic circuit that can trigger the engine immobilizer system. If the circuit is damaged, the engine may not be started. Therefore,

- Avoid placing the remote control key in direct sunlight or in a high-temperature or humid place.
- Avoid dropping the remote control key from a high place or crushing it by heavy objects.
- Avoid exposing the remote control key to any liquid. If the key gets wet accidentally, dry it immediately.

NOTE

- The buttons of the remote control key do not work when the START/STOP button is set to “ACC” or “ON” position.
- If the unlocking or locking function of the remote control key is deactivated, you can try to press the buttons on the remote control key 3 times continuously to activate the function.

Button operations



① : Locking button
② : Unlocking button
③ : Liftgate unlocking button
④ : Left power sliding door opening/ closing button
⑤ : Right power sliding door opening/ closing button

① Locking button

- If this button is pressed once within the effective range of the remote control key, all doors will be locked; if this button is pressed and held, the windows, sunroof and sunshade will be automatically closed; if the button is released when the windows, sunroof and sunshade are being closed automatically, they will stop moving.
- If this button is pressed twice continuously, the vehicle locating function will be realized and the turn signal lamps will flash 3 times quickly.

CAUTION

Before closing the windows, sunroof and sunshade by the remote control key, make sure that there are no body parts (such as head and hands) in the movement path of the windows, sunroof or sunshade so as to prevent a risk of pinch injury.

NOTE

- The vehicle is equipped with the locking-sensitive window closing function. When this function is turned on, if the button is pressed once, all doors will be locked, and the windows and sunroof will be automatically closed.
- The locking-sensitive window closing function can be set to ON or OFF on the AV system display.
- When the doors are unlocked, the turn signal lamps will flash once, and the horn will sound once. The indication by horn can be set to ON or OFF on the AV system display.

② Unlocking button

- If this button is pressed once within the effective range of the remote control key, all doors will be unlocked; if this button is pressed and held, the windows will be automatically opened and the sunroof will be automatically tilted; if the button is released when the windows are being opened or the sunroof is being tilted, the windows or the sunroof will stop moving.

NOTE

When the doors are unlocked, the turn signal lamps will flash twice, and the horn will sound twice. The indication by horn can be set to ON or OFF on the AV system display.

NOTE

The four doors or only the driver door can be unlocked by pressing the soft key on the A/V display.

CAUTION

After the button is pressed to unlock the door, if the door is not opened within a period of time, the system will re-lock the door.

③ Liftgate unlocking button

Within the effective range of the key, press and hold this button to unlock the liftgate.

- If PLG is not available, the liftgate needs to be opened manually.
- If PLG is available, the liftgate will open electrically to the set height. If you press this button again during the opening or closing of liftgate, the liftgate will stop at the current position.

④ Left power sliding door opening/closing button

- Within the effective range of the remote control key, when the sliding door is fully closed, if you press and hold the button, the left sliding door will be electrically opened, and the speaker will sound intermittently.
- Within the effective range of the remote control key, when the sliding door is fully opened, if you press and hold the button, the left sliding door will be electrically closed, and the speaker will sound intermittently.
- If you press the button during the opening or closing process, the sliding door will stop.

NOTE

- The power sliding door can only be opened or closed with the remote control key when the electric opening and closing function of sliding door is activated => See page 68.
- If you press and hold the button to open the left sliding door when the vehicle is locked, the horn will also sound twice.

⑤ Right power sliding door opening/closing button

- Within the effective range of the remote control key, when the sliding door is fully closed, if you press and hold the button, the right sliding door will be electrically opened, and the speaker will sound intermittently.
- Within the effective range of the remote control key, when the sliding door is fully opened, if you press and hold the button, the right sliding door will be electrically closed, and the speaker will sound intermittently.
- If you press the button during the opening or closing process, the sliding door will stop.

NOTE

- The power sliding door can only be opened or closed with the remote control key when the electric opening and closing function of sliding door is activated => See page 68.
- If you press and hold the button to open the right sliding door when the vehicle is locked, the horn will also sound twice.
- When the fuel tank cap is opened, the electric opening and closing function of the right sliding door will be deactivated; however, it can be opened or closed manually, where the manual opening or closing is limited, that is, there will be a mechanical stop that prevents the sliding door from opening fully, so as not to interfere with the fuel tank cap. After the fuel tank cap is closed, the electric opening and closing function of the right sliding door will restored.

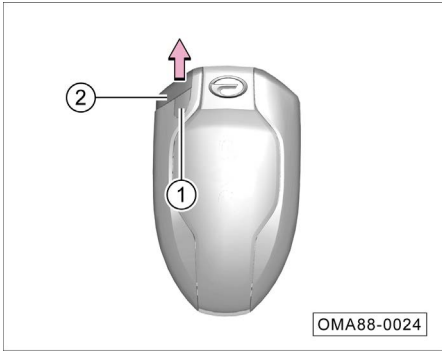
Battery replacement

Each time you press the buttons on the remote control key, the indicator lamp of the key will flash once. If the indicator lamp fails to flash, or you need to press the buttons several times to lock or unlock the doors, the battery may be exhausted or about to run out. It is recommended to go to the GAC Motor authorized shop for the battery replacement.

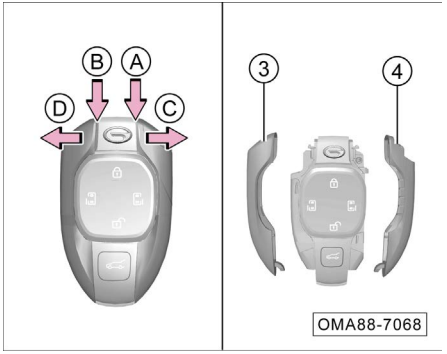
CAUTION

- Be sure to replace the battery with a new one of the same rated voltage and size.
- An inappropriate battery may damage the remote control key.
- Always comply with relevant environmental regulations to dispose the exhausted battery.

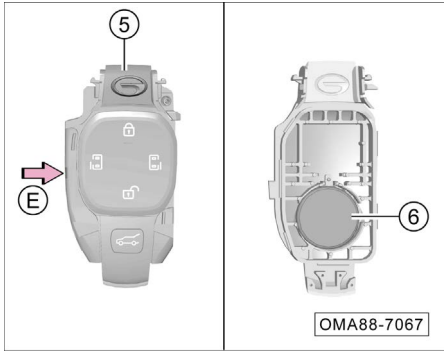
Battery replacement steps



- Press the locking button ① and pull out the emergency mechanical key ② as arrowed.



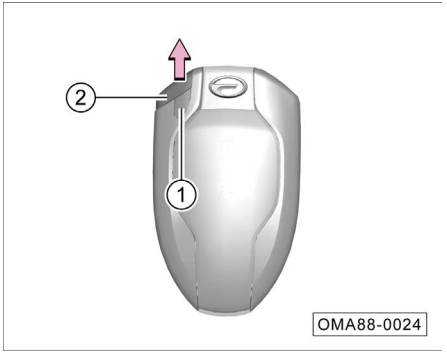
- Use a slotted screwdriver wrapped by cloth to pry open the chrome plated housing of the remote control key at positions (arrows A and B) in the direction of arrows C and D.
- Take off the chrome plated housings ③ and ④ of the remote control key.



- Take off the transparent trim cover ⑤.
- Use a slotted screwdriver wrapped by cloth to pry open the housing of the remote control key at position (arrow E).
- Take out the battery ⑥.
- Assemble the remote control key in the reverse steps mentioned above.

4.2.2 Emergency mechanical key

Emergency mechanical key



- Press the locking button ① and pull out the emergency mechanical key ② as arrowed.

4.2.3 Door lock system

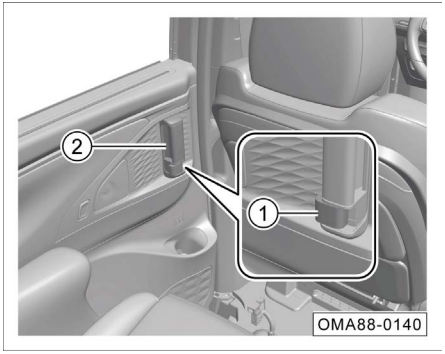
Central locking button

The central locking button ① can be used to lock and unlock the doors in the vehicle:

- Lock all the doors: Press the end of the central locking button ①.
- Unlock all the doors: Press the end of the central locking button ①.

Door latch and inside handle

- If the vehicle is locked, pull the inside handle of any door once to unlock that door only; pull the inside handle of that door again to open that door.
- If the vehicle is unlocked, pull any door handle once to open the door directly.



Each sliding door has a door latch ① and an inside handle ②.

- If the door latch ① is pushed forward, the corresponding door is locked.
- If the door latch ① is pushed backward, the corresponding door can be unlocked; if the inside handle ② is pulled backward, the corresponding sliding door can be opened.

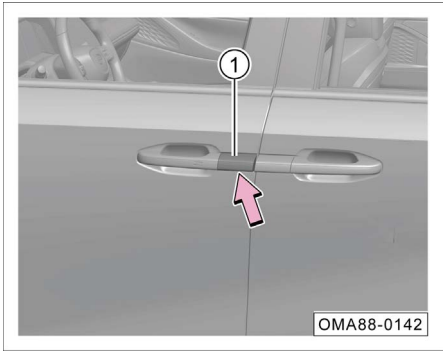
NOTE

When the child safety lock is activated => See page 64, even if the sliding door latch is unlocked, the sliding door cannot be opened by operating the inside handle. In this case, the sliding door shall be opened from outside. And do not pull the inside handle with force to avoid damages.

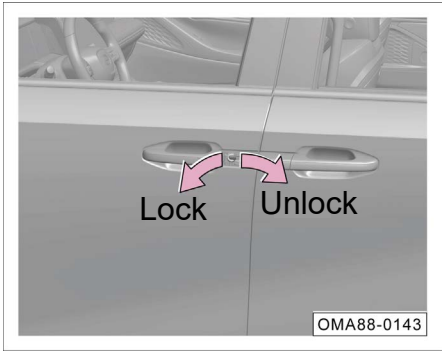
CAUTION

- Before driving the vehicle, make sure that all doors are properly closed and locked.
- Do not pull the inside handle during driving to avoid accidents when opening the door.
- When opening or closing the door, check the surroundings of the vehicle, such as whether the vehicle is on a slope, whether there is enough space to open the door or whether there is strong wind. When opening or closing the door, please firmly hold the door handle to prepare for any unpredictable movement.

Door lock hole

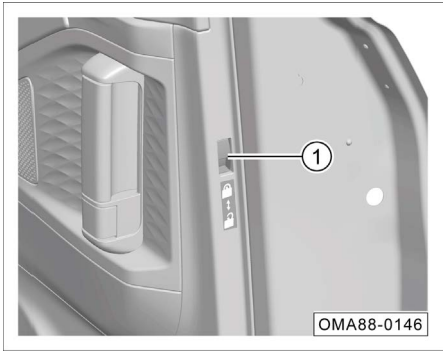


- Take out the emergency mechanical key. => See page 62
- Insert the mechanical key into the notch on the trim cover of mechanical lock of left front door, gently pry up the trim cover, pull up the door handle and remove the trim cover.



- Insert the emergency mechanical key into the driver's door lock hole.
- Turn the key clockwise to unlock the driver's door only.
- Turn the key counterclockwise to lock all the doors.

Child safety lock



- Activation: Turn the child safety lock switch from to position to activate the child safety lock.
- Deactivation: Turn the child safety lock switch from to position to deactivate the child safety lock.

NOTE

- Before driving the vehicle, if any child sits in the rear seat, make sure that the child safety lock is activated.
- When the child safety lock is activated, the sliding door cannot be opened by operating the inside handle. In this case, the sliding door shall be opened from outside. And do not pull the inside handle with force to avoid damage.

WARNING

When the child safety lock is activated, never leave children or handicapped persons in the vehicle alone. Once the doors are locked, it is difficult for children or handicapped persons to leave the vehicle in an emergency; locked doors in an accident will make it more difficult to rescue persons inside the vehicle.

Automatic unlock function

If the vehicle stops with the doors locked and the START/STOP button set to “OFF” position, the four doors will be automatically unlocked.

NOTE

The Auto Unlock function be activated or deactivated via the AV system setting.

Speed sensing door lock

If this function is activated with all doors closed, the vehicle will be automatically locked at certain vehicle speed or after certain driving time.

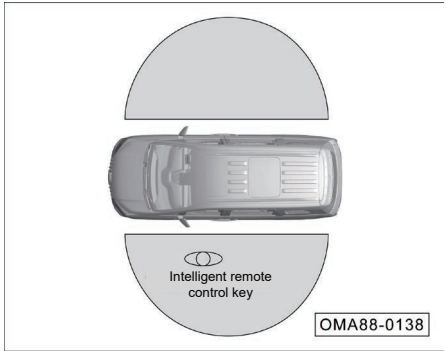
NOTE

- Please read the related information above before activating this function.
- The speed-sensing door lock function can be set to ON or OFF on the AV system display.

Collision unlock function

With doors locked and the START/STOP button set to “ON” position, when the system detects that the vehicle has suffered a severe collision, all doors will be automatically unlocked. Depending on the impact force and impact range, the system may not work under extreme conditions.

Intelligent active unlock



- When the intelligent active unlock function is activated and the intelligent remote control key is brought to the area within 1m of the vehicle, the vehicle will be automatically unlocked.

NOTE

- The intelligent active unlock function can be set to ON or OFF on the AV system display.
- If the intelligent active unlock is successful, the turn signal lamps will flash twice and the horn will sound twice.
- When the vehicle has been not in use for more than 7 days, the intelligent active unlock function will be automatically deactivated in order to reduce the power consumption of the vehicle. In this case, you need to use the intelligent remote control key or touch the door handle to unlock the doors, and after the vehicle is started, the intelligent active unlock function will be restored.

Intelligent active lock

- With the intelligent active lock function activated and the START/STOP button set to “OFF” position, after all doors are closed, if the intelligent remote control key is taken away from the vehicle to an area within about 2m from the vehicle for more than 2min or to an area more than about 2m away from the vehicle, the vehicle will be automatically locked.
- If the key is taken away from the vehicle within about 2 m for more than 2 minutes, the system will temporarily deactivate the intelligent active lock function for the purpose of power saving; the user needs to open and then close one of the doors to re-activate the intelligent active lock function.

NOTE

- The intelligent active lock function can be set to ON or OFF on the AV system display.
- If the intelligent active unlock is successful, the turn signal lamps will flash once and the horn will sound once.
- If the intelligent active lock is activated successfully but the liftgate is ajar, the audible and visual alarms will be triggered to remind you.

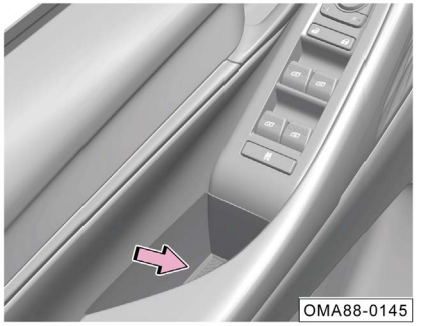
It should be noted that the intelligent active lock function will not be activated in case of the followings:

- The START/STOP button is set to “ACC” or “ON” position.
- The battery voltage is low.
- The intelligent remote control key is in the vehicle.
- No intelligent remote control key is detected within about 2m of the vehicle.
- Any door is not closed.
- The intelligent remote control key is thrown into the vehicle from the door window.
- The intelligent remote control key is in the trunk.
- The PEPS antenna is faulty.
- The intelligent remote control key is too close to the vehicle.

CAUTION

- The intelligent active lock function cannot automatically close the door windows and sunroof, so before leaving the vehicle, make sure that all windows and sunroof are closed.
- The locking-sensitive window closing function can be set to ON or OFF on the AV system display. If the intelligent active lock function is activated, the windows and sunroof will be automatically closed.
- Do not leave children or handicapped persons in the vehicle alone when using the intelligent active lock function.

4.2.4 Door



- To close the door in the vehicle, grab the door handle and pull it inward.
- To close the door outside, directly push the door inward.

CAUTION

Before opening the door, always pay attention to other vehicles or pedestrians outside the vehicle to avoid accidents caused by collision.

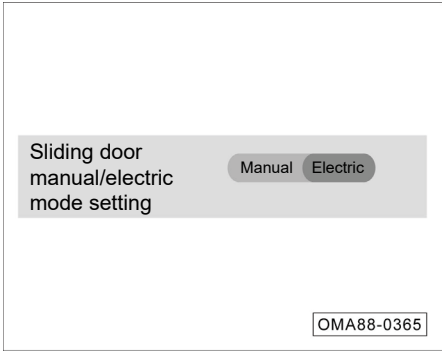
⚠ WARNING

- **Always ensure that all doors are closed to prevent suddenly opening during driving, which may cause personal injuries or accident.**
- **Open or close the doors only when the vehicle is stationary.**
- **Do not put your hands on the edge of the door when closing the door, otherwise there will be a risk of pinching.**

i NOTE

- If the door is not closed properly, please re-open the door and close it again.
- If the door is ajar, there will be a corresponding indication on the instrument cluster; then when the vehicle speed exceeds 5km/h, a buzzer will sound.

Electric opening and closing of sliding door



With the START/STOP button in “ON” position, the opening method of sliding door can be set to manual opening or automatic opening via the AV system display.default.

i NOTE

- When the electric opening and closing function of sliding door is deactivated, the corresponding electric auxiliary pull-in function will still be retained. If the sliding door is half closed, the electric pull-in function will still be triggered to ensure that the sliding door is completely closed.
- Please try to avoid switching between activation and deactivation of the electric opening and closing function of sliding door on a slope, to prevent accidents caused by sudden loss of power assist of sliding door. If this happens, to avoid the danger caused by sudden sliding of the sliding door, the speed protection mode will be entered, and then the sliding door can only be operated in steps until it is fully opened or closed.

Dynamic protection function of power sliding door

- When the vehicle speed is higher than 5km/h, the sliding door will not continue to be opened, but can only be closed, and the speaker will give a short alert tone.
- When the vehicle speed is higher than 5km/h and the sliding door is still not completely closed, the speaker will give an alert tone continuously to remind the driver to close the sliding door.

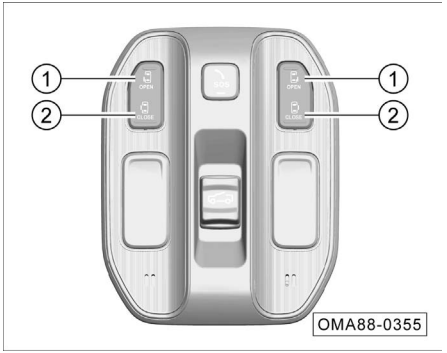
Operation of remote control key

- When the electric opening and closing function of sliding door is activated, if the sliding door button on the remote control key is pressed and held, the corresponding sliding door will be opened or closed electrically. => See page 58

NOTE

- When the fuel tank cap is opened, the electric opening and closing function of the right sliding door will be deactivated; however, it can be opened or closed manually, where the manual opening or closing is limited, that is, there will be a mechanical stop that prevents the sliding door from opening fully, so as not to interfere with the fuel tank cap. After the fuel tank cap is closed, the electric opening and closing function of the right sliding door will restored.
- When the sliding door is locked, its electric opening function will be deactivated.
- When the sliding door is open or closed or its anti-pinch function is triggered, the speaker will give an alert tone.

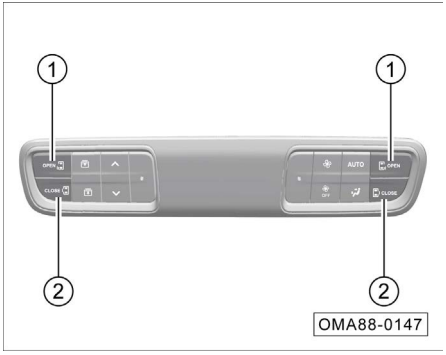
Operation of front dome lamp button



When the electric opening and closing function of sliding door is activated, if the button on the front dome lamp combination switch is pressed, the corresponding power sliding door will be opened or closed electrically.

- Press the sliding door button ① to electrically open the corresponding sliding door.
- Press the sliding door button ② to electrically close the corresponding sliding door.

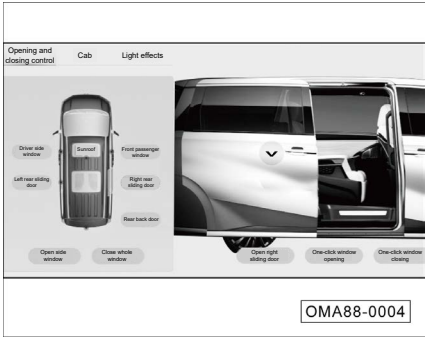
Operation of rear central control panel button



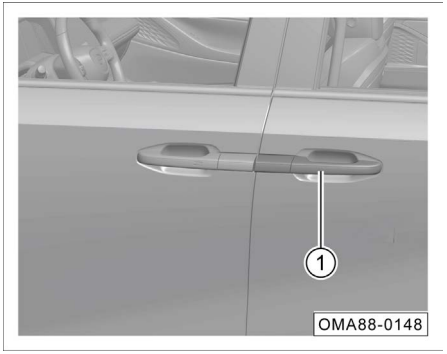
When the electric opening and closing function of sliding door is activated, if the button on the rear central control panel is pressed, the corresponding power sliding door will be opened or closed electrically.

- Press the sliding door button ① to electrically open the corresponding sliding door.
- Press the sliding door button ② to electrically close the corresponding sliding door.

Operation of AV system soft key



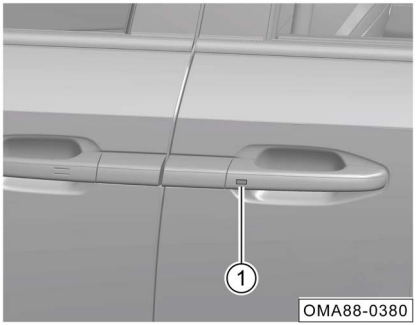
With the START/STOP button in “ON” position, when the electric opening and closing function of sliding door is activated, click on “3D car model in smart scene” in the main interface or “My Car” in the application menu to enter My Car interface, and then click “Open sliding door” or “Close sliding door” to electrically open or close the sliding door.



Operation of outside handle

When the electric opening and closing function of sliding door is activated, if the sliding door outside handle is pulled, the sliding door will be opened or closed electrically.

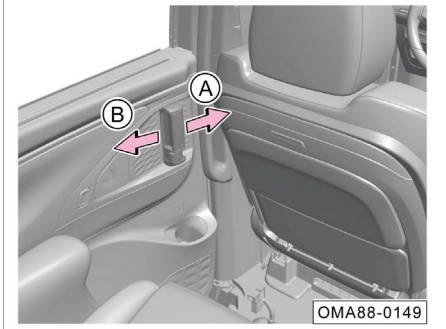
- When the sliding door is fully open, pull the outside handle ① to electrically close the corresponding sliding door.
- When the sliding door is fully closed and unlocked, pull the outside handle ① to electrically open the corresponding sliding door.
- During the operation of the sliding door, if the outside handle ① is pulled, the sliding door will stop.



Operation of outside handle button

When the electric opening and closing function of sliding door is activated, if the sliding door outside handle button is pressed and held, the sliding door will be opened or closed electrically.

- When the sliding door is fully open, press and hold the button ① to electrically close the corresponding sliding door.
- When the sliding door is fully closed and unlocked, press and hold the button ① to electrically open the corresponding sliding door.
- During the operation of the sliding door, if the button ① is pressed, the sliding door will stop.



Operation of inside handle

When the electric opening and closing function of sliding door is activated and the door latch and child safety lock are deactivated, if the inside handle is pulled, the sliding door will be opened or closed electrically.

- Pull the inside handle in the direction of arrow A to electrically close the corresponding sliding door.
- Pull the inside handle in the direction of arrow B to electrically open the corresponding sliding door.
- During the operation of the sliding door, it can stop by pulling the handle in the reverse direction.

Anti-pinch function of power sliding door

1. Anti-pinch strip mode

This is effective during the electric closing:

- If this function is triggered, the sliding door will stop being closed and be electrically opened to the fully open position.

2. Obstacle detection mode

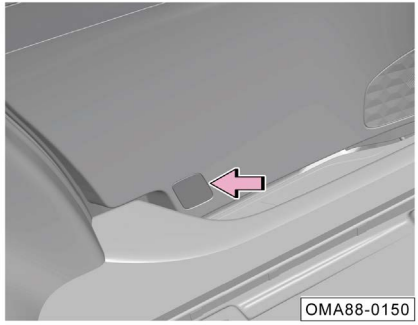
This is effective during the electric opening and closing:

- In the electric closing process, if an obstacle to closing of the sliding door is detected, the anti-pinch function will be triggered, and the sliding door will stop closing and be electrically opened to the fully open position.
- In the electric opening process, if an obstacle to opening of the sliding door is detected, the anti-pinch function will be triggered, and the sliding door will close slightly and then stop.

i NOTE

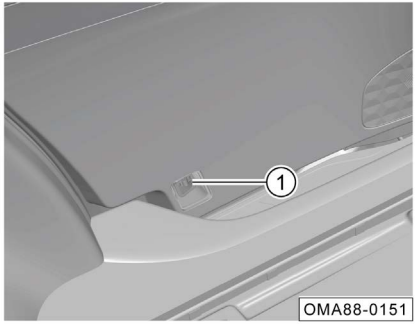
When the anti-pinch function is triggered, the speaker gives an alert tone.

Emergency opening of sliding door



When the sliding door cannot be opened normally because the vehicle battery is disconnected or the electric door lock fails, try the interior emergency opening of the sliding door:

1. Pry open the trim panel at the rear lower part of the sliding door as arrowed.

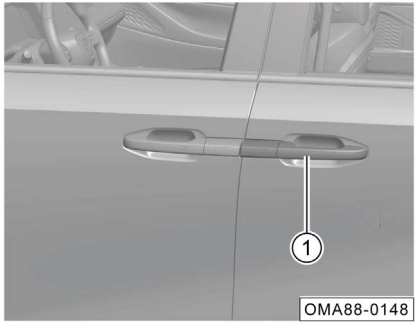


2. Pull the emergency cable ① and the sliding door inside handle simultaneously to try to open the sliding door.

i NOTE

If the emergency opening of sliding door fails, please go to the GAC Motor authorized shop for inspection in time.

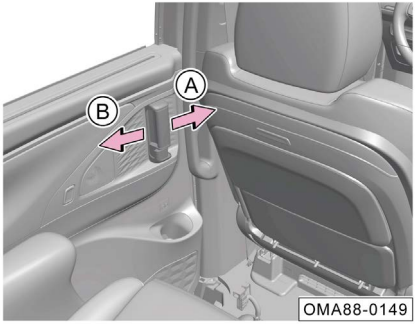
Manual opening and closing of sliding door



Operation of outside handle

When the electric opening and closing function is off, the power sliding door may be opened and closed manually.

- When the sliding door is fully open, pull the outside handle ① for unlocking and pull the sliding door to close it.
- When the sliding door is fully closed and unlocked, pull the outside handle ① for unlocking and pull the sliding door to open it.



Operation of inside handle

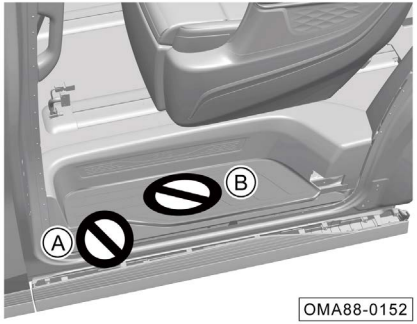
- When the sliding door is fully open, pull the inside handle in the direction of arrow A to close the sliding door.
- When the sliding door is fully closed and the door latch and child safety lock are deactivated, pull the inside handle in the direction of arrow B to open the sliding door.

NOTE

- If the sliding door is closed too lightly, it may be ajar. You need to open and close it again.
- If the sliding door is ajar, there will be a corresponding indication on the instrument cluster display; then when the vehicle speed exceeds 5 km/h, the speaker will alarm continuously.

WARNING

- **Before driving, always ensure that all sliding doors are closed to prevent sudden opening during driving, which may cause personal injuries or accident.**
- **Open or close the sliding doors only when the vehicle is stationary.**
- **Do not put your hands on the edge of the door when closing the door, otherwise there will be a risk of pinching.**



CAUTION

- No trampling is allowed in the guide groove area of sliding door in area A!
- During the opening or closing of the sliding door, it is forbidden to place articles at the sliding door step in Area B or put your feet in this area.

4.2.5 Liftgate

Unlocking of liftgate with remote control key

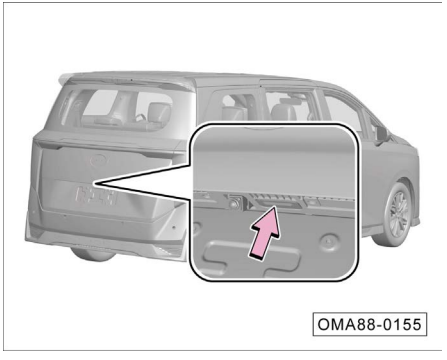
Within the effective range of the smart key, press and hold the button on the smart key to unlock the liftgate.

- If PLG is not available, the liftgate needs to be opened manually.
- If PLG is available, the liftgate will open electrically to the set height. If you press this button again during the opening of the liftgate, the liftgate will stop at the current position.

CAUTION

The button switch is a non-directional signal, and the liftgate confirms the relevant opening and closing action according to the current state and the last action. If the last time the liftgate opening process was suspended, press the button twice next time and the liftgate will be closed; if the last time the liftgate closing process was suspended, press the button twice next time and the liftgate will open.

Unlocking of liftgate with outside button



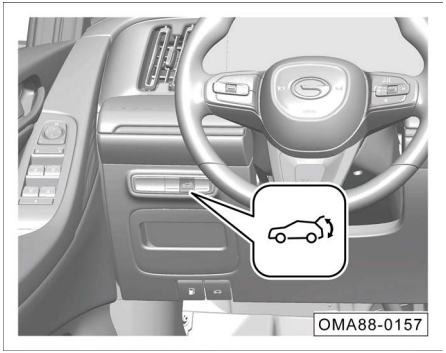
Within the effective range of the smart key, press and hold the liftgate button to unlock the liftgate.

- If PLG is not available, the liftgate needs to be opened manually.
- If PLG is available, the liftgate will open electrically to the set height. If you press this button again during the opening of the liftgate, the liftgate will stop at the current position.

NOTE

When the vehicle is unlocked and stationary, if you press the liftgate unlocking button directly without carrying the intelligent remote control key, the liftgate will also be unlocked and opened.

Unlocking of liftgate with button on instrument panel



Press and hold the liftgate button on the instrument panel to open the liftgate.

- If PLG is not available, the liftgate needs to be opened manually.
- If PLG is available, the liftgate will open electrically to the set height. If you press this button again during the opening of the liftgate, the liftgate will stop at the current position.

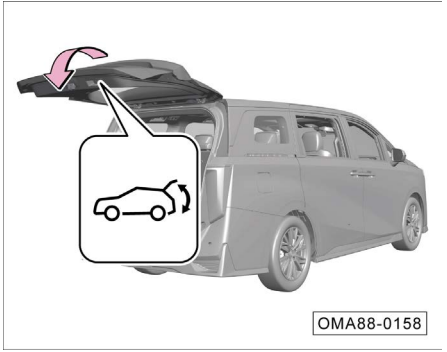
NOTE

When the liftgate is electrically opened from a stationary state, the turn signal lamps will flash and the buzzer will sound.

CAUTION

The button switch is a non-directional signal, and the liftgate confirms the relevant opening and closing action according to the current state and the last action. If the last time the liftgate opening process was suspended, press and hold the button next time and the liftgate will be closed; if the last time the liftgate closing process was suspended, press and hold the button next time and the liftgate will open.

Unlocking of liftgate with inside button*



- Press the inside button of the liftgate to electrically close the liftgate.
- In this process, press the inside button again to suspend opening/closing of the liftgate.

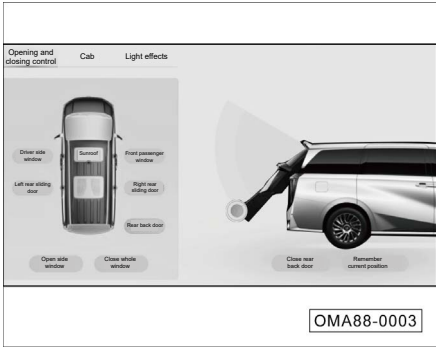
Setting of second height of liftgate:

When the height of opening of liftgate is 55%~98%, press and hold the inside button of liftgate for about 2 s to set the second height of liftgate successfully, and the buzzer will sound twice.

CAUTION

The button switch is a non-directional signal, and the liftgate confirms the relevant opening and closing action according to the current state and the last action. If the last time the liftgate opening process was suspended, press the button next time and the liftgate will be closed; if the last time the liftgate closing process was suspended, press the button next time and the liftgate will open.

Control by soft key of AV system display*



With the START/STOP button in “ON” position, click on “3D car model in smart scene” in the main interface of AV system or “My Car” in the application menu to enter My Car interface.

- Click the soft key “Open liftgate” or “Close liftgate” to electrically open or close the liftgate.
- Drag the liftgate icon to set the target positions of 20%, 40%, 60%, 80% and 100%, and release the liftgate icon to allow the liftgate to move to the set target positions.
- In this process, drag the liftgate icon again to suspend opening/closing of the liftgate.
- When the height of opening of liftgate is 55%~98%, click the soft key “Memorize current position” to set the second height of liftgate successfully.
- Click the soft key “Clear memory position” to clear the second height of liftgate successfully.

Easy open of liftgate

OMA88-0156

- With the START/STOP button in “OFF” position and the four doors and liftgate closed, if you take the intelligent remote control key to be about 0.5 m from the liftgate sensing area, the horn will sound once and the high-mounted stop lamp will start to flash, and if you stay there or take a step back, the turn signal lamps will flash and the liftgate will be automatically opened. If you leave the liftgate area when the high-mounted stop lamp flashes (4 times), the liftgate will not be opened.

NOTE

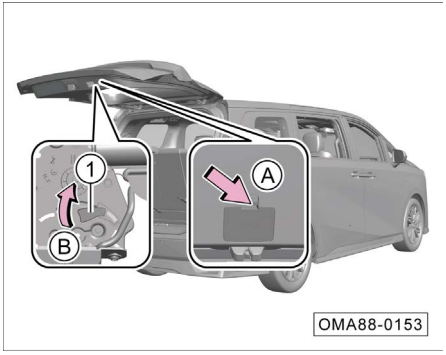
- When the liftgate is automatically opened, the horn will sound once, the high-mounted stop lamp will flash 4 times, and the turn signal lamps will flash twice.
- If you leave the liftgate sensing area when the high-mounted stop lamp is flashing, this function can be paused, and the liftgate will not be opened.
- If you press the button on the intelligent remote control key when the high-mounted stop lamp is flashing, this function can be paused, and the liftgate will not be opened. To re-activate the easy open function of liftgate, you need to open and then close one door.
- The Easy Open function of the liftgate can be set to ON/OFF via the AV system display.

CAUTION

- When washing the vehicle, make sure that the intelligent remote control key is outside the liftgate sensing area; otherwise the liftgate will be opened. Therefore, it is recommended to deactivate this function in this case.
- If you pick up something near the liftgate while carrying the intelligent remote control key, please note that the liftgate may be opened.
- Before activating the easy open function to open the liftgate, make sure that no one or obstacle is within the movement range of the liftgate.

Emergency opening of liftgate

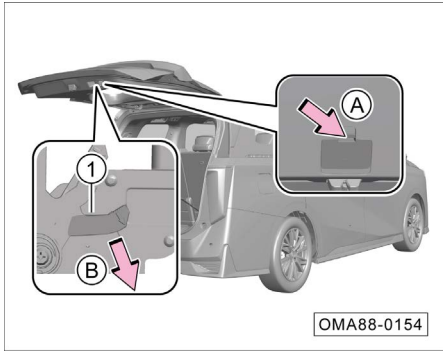
Electric opening of liftgate



When the vehicle is out of power or the liftgate fails to be opened normally, please try the interior emergency opening of liftgate:

1. Fold down the 3rd-row seat back. => See page 119
2. Pry open the trim panel on the liftgate at position (arrow A).
3. Move the liftgate emergency switch ① in the direction of arrow B for emergency unlocking and opening of the liftgate.

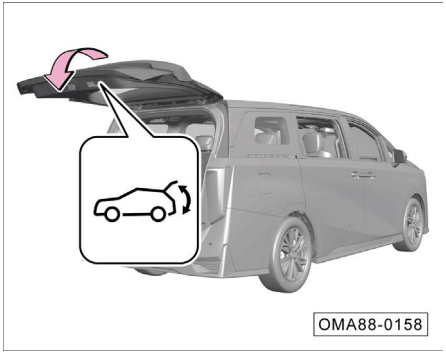
Manual opening of liftgate



If the liftgate cannot be opened normally when the vehicle is out of power or the liftgate fails, please try the emergency opening of liftgate from the inside of vehicle:

1. Fold down the third-row seat back. => See page 119
2. Pry open the trim panel on the liftgate at position indicated by arrow A.
3. Move the liftgate emergency switch ① in the direction of arrow B for emergency unlocking and opening of the liftgate.

Closing of liftgate



Electric closing*

- If you press the liftgate inside button, the power liftgate will be automatically lowered until it is closed. In this case, if you press this button again in the closing process, the power liftgate will stop.
- Within the operating range of the intelligent remote control key, if you press the button on the key twice, the power liftgate will be automatically lowered until it is closed. In this case, if you press this button again in the closing process, the power liftgate will stop.

- If you press and hold the liftgate button on the instrument panel, the power liftgate will be automatically lowered until it is closed. In this case, if you press this button again in the closing process, the power liftgate will stop.
- If you press down the liftgate manually, after sensing the closing intention, the liftgate will be automatically lowered until it is closed.

Manual closing

When the electric opening and closing function of the liftgate fails, the liftgate may be closed manually:

- Lower the liftgate close to the rear bumper cover, and then press down the liftgate firmly with both hands to close it.

CAUTION

During closing of the liftgate, do not put your hands or any part of your body in the closing area of the liftgate so as to avoid pinch injury.

NOTE

- When the power liftgate is closed electrically from a stationary state, the turn signal lamps will flash twice;
- When the power liftgate is closed electrically, the buzzer will beep intermittently.
- If the power liftgate is ajar, there will be a corresponding indication on the instrument cluster display.

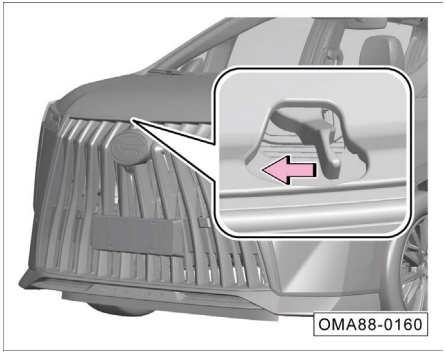
CAUTION

- The power liftgate shall always be closed properly, otherwise accidents are likely to occur.
- Be careful when closing the liftgate to ensure that no person is within the movement range of the liftgate.
- Always ensure that the closed liftgate is locked to prevent sudden opening during driving.

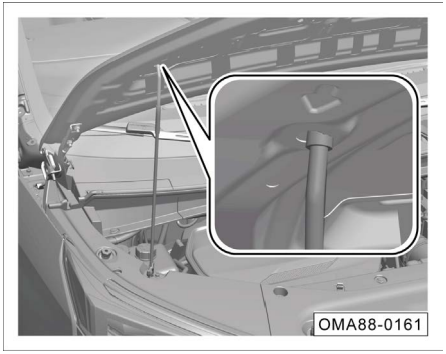
4.2.6 Engine hood

Opening of engine hood

- Pull the engine hood release handle under the driver's instrument panel as arrowed, and then the engine hood will be unlocked and open slightly.



- Push the locking mechanism as arrowed to unlock the engine hood fully.



- Open the engine hood upward, and support it by the stay bar.

Closing of engine hood

- Lower the engine hood to a height close to the fenders, and then press down the front end of the engine hood with force for firm locking.

NOTE

- Proper lubrication of the locking mechanism moving parts of the engine hood is helpful for opening or closing the engine hood.
- If the engine hood is ajar, the instrument cluster will display the corresponding alarm information; when the vehicle speed exceeds 5 km/h, the buzzer will sound.

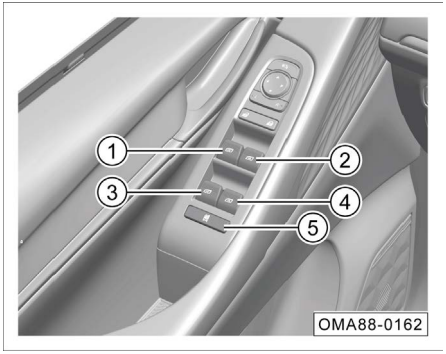
4.2.7 Power window

The power window can be operated when the START/STOP button is in “ON” position, and stays operable within about 40 s after the START/STOP button is turned from “ON” position to “ACC” or “OFF” position, but will become inoperable if any door is opened within this 40 s.

CAUTION

- Please close all windows before leaving the vehicle.
- Do not put your hands on the edges of the windows when closing the windows, otherwise there will be a risk of pinching.

Driver's power window control button



① Left front power window control button
② Right front power window control button
③ Left rear power window button
④ Right rear power window button
⑤ Passenger's power window control button

- If the button ① is pulled up to the first stop position, the power window will be lifted for closing until the button is released or the window reaches the highest position.
- If the button ① is pulled up to the limit position, the power window will be lifted automatically for closing until the window reaches the highest position.
- If the button ① is pressed down to the first stop position, the power window will be lowered for opening until the button is released or the window reaches the lowest position.
- If the button ① is pressed down to the limit position, the power window will be lowered automatically for opening until the window reaches the lowest position.

i NOTE

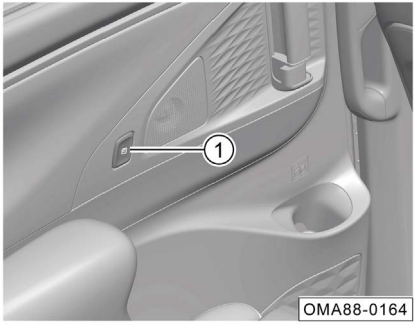
If you want to stop the window during the automatic lifting or lowering, just press down/ pull up the button ①.

- Buttons ②, ③ and ④ are operated in the same way as button ①, and control the corresponding door windows only.
- If you press the passenger's door window lock button ⑤, the button indicator lamp will come on and the passenger's power window control buttons cannot work anymore. If you press this button again, this function will be deactivated and the button indicator lamp will go out.

Front passenger's power window control button

- The front passenger's power window control button ① may be operated by reference to the driver's power window control button.

Rear passenger's power window control button



- Press the upper end of button ① to the first stop position, and the window will be lifted for closing until the button is released or the window reaches the highest position.
- Press the upper end of button ① to the limit position, and the window will be lifted automatically to the highest position.
- Press the lower end of button ① to the first stop position, and the window will be lowered for opening until the button is released or the window reaches the lowest position.
- Press the lower end of button ① to the limit position, and the window will be lowered automatically to the lowest position.

i NOTE

If you want to stop the window during the automatic lifting or lowering, just press the upper or lower end of button ①.

Initialization of anti-pinch function*

If the express-up function is not available, or the anti-pinch function fails, or the initialization becomes invalid automatically because the anti-pinch function is triggered multiple times in a short period of time, the power window needs to be initialized again.

1. Pull up the power window control button, and then the window is lifted in steps until it is completely closed.
2. After the window is completely closed, continue to pull up the power window control button and hold it for about 2s to complete the initialization.
3. After the initialization of the corresponding window, operate the window button to activate the express-down feature, and then continue to press the power window button and hold it for about 2 s, to enable the window to reach a hard stop.
4. Lift the power window button to check whether the express-up feature is available.

⚠ WARNING

- **If the window has no anti-pinch function during the initialization learning process, please do not use any part of your body or other objects to hinder the closing of the window, otherwise it will cause personal injury and affect the result of the initialization learning.**
- **If the power window system fails, please go to the GAC Motor authorized shop for inspection in time.**

Locking-sensitive window closing function*

If the vehicle is locked (by remote control and intelligent active lock) with any window opened, the system will automatically close the window to prevent the vehicle from being damaged due to any opened window. The locking-sensitive window closing function can be activated or deactivated via the AV system setting. If the window fails to be closed automatically due to abnormal conditions such as activation of anti-pinch function, the horn will sound 4 times to remind the user that the window closing fails.

CAUTION

The locking-sensitive window closing function is effective only when the battery SOC and relevant parts are normal. Do not leave the vehicle until it is confirmed that the windows are fully closed.

Automatic window calibration

If the window cannot be automatically lifted due to external factors, the window will first lower to the bottom for automatic calibration before automatic lifting.

CAUTION

Under special circumstances, an individual window may not be automatically lifted, and thus the window is required to be manually lifted for calibration.

Window open warning

When the START/STOP button is turned to “OFF” position with any window open, if you open the driver’s door, the system will send a buzzer sound and the instrument cluster display will display the warning message “Window open”.

4.2.8 Power sunroof

The power sunroof is operable only when the START/STOP button is in “ON” position.

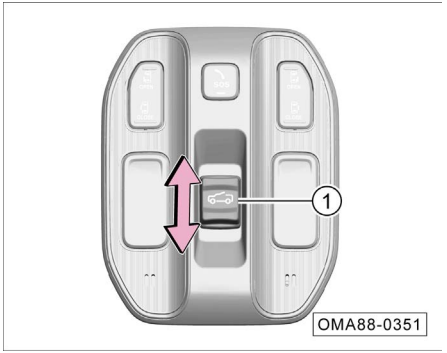
NOTE

When the START/STOP button is in “OFF” position with the power sunroof not closed, if you open the driver’s door, the instrument cluster will display the message “Sunroof open” and send a buzzer sound; in this case, be sure to check whether the sunroof is closed properly.

CAUTION

Please close the sunroof, otherwise there will be a risk of water ingress on rainy days.

Opening and closing of power sunroof



- To open the sunroof slightly, push the sunroof switch ① backward, and then the sunroof will move in the opening direction for a short distance and then stop.
- To close the sunroof slightly, push the sunroof switch ① forward, and then the sunroof will move in the closing direction for a short distance and then stop.

- If you push the sunroof switch ① backward and hold it for several seconds, the sunroof will be fully opened automatically.
- If you push the sunroof switch ① forward and hold it for several seconds, the sunroof will be fully closed automatically.

CAUTION

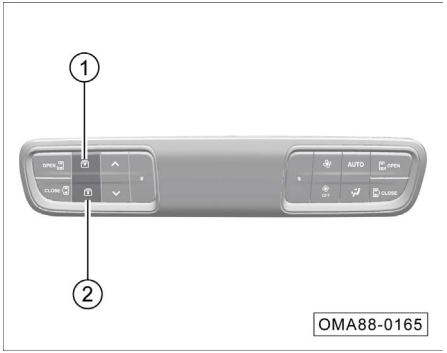
Please completely close the sunroof before leaving the vehicle. Otherwise, rain or sundries may enter the vehicle.

Sunroof - Tilting

- When you press the sunroof switch ① with sunroof fully closed, the sunroof will be tilted outward. Just push the sunroof switch ① forward to deactivate the tilting function.

Opening/closing of power sunshade

Operation of rear central control panel button



When the START/STOP button is in “ON” position, open or close the power sunshade by pressing the button ① or ② of the rear central control panel.

- To open the sunshade slightly, press the button ①, and then the sunshade will move in the opening direction for a short distance and then stop.
- To close the sunshade slightly, press the button ②, and then the sunshade will move in the closing direction for a short distance and then stop.

- If you press and hold the button ① for several seconds, the sunshade will be fully opened automatically.
- If you press and hold the button ② for several seconds, the sunshade will be fully closed automatically.

Remote control operation

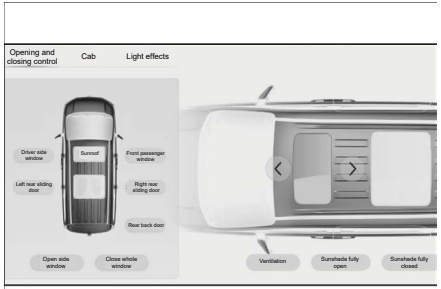
When the START/STOP button is in “OFF” position, if you press and hold the button on the remote control key, the sunroof and sunshade will be closed by remote control. In the closing process, it is necessary to press and hold the button, and once it is released, the closing action will stop.

When the START/STOP button is in “OFF” position, if you press and hold the button on the remote control key, the sunroof will be tilted by remote control. In the sunroof tilting process, it is necessary to press and hold the button, and once it is released, the tilting action will stop.

NOTE

The remote control function is designed for tilting and closing the power sunroof, and is not applicable to the opening of sunroof.

AV system display control

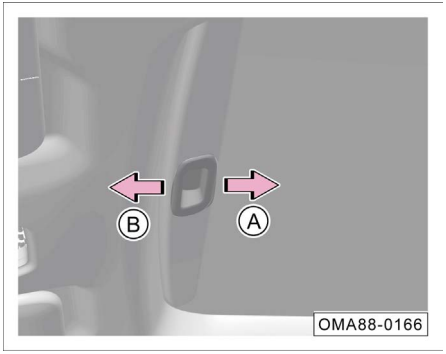


When the START/STOP button is in “ON” position, click “3D car model in smart scene” in the AV system interface or “My car” in the application menu to access My Car interface, where the sunroof and sunshade can be controlled via the soft keys “Ventilation”, ❮ , ❯ , “Open sunshade”, “Close sunshade”.

CAUTION

Do not touch the sunshade with hand or object when it is opening or closing; otherwise, the sunshade may incur wrinkle, dislodgement or even failure.

Opening and closing of sunshade



Hold the holder:

- Pull it in the direction of arrow A to open the sunroof visor.
- Pull it in the direction of arrow B to close the sunroof visor.

NOTE

The sun visor will be automatically opened as the sunroof is opened.

CAUTION

- In order to prevent damage to the sun visor due to attachment of the airflow generated during the movement of the vehicle, the sun visor can only be completely closed when the sunroof is completely closed.
- Please close the power sunroof before closing the sunroof visor.
- If only the sunroof visor is closed and the power sunroof is open, there is a danger of water entering the vehicle when it rains.

Anti-pinch function of sunroof

The anti-pinch function is available for the sliding closing and the tilting closing of the sunroof.

- If the anti-pinch function is activated when the sunroof is closed by sliding, the sunroof will move in the opening direction for a certain distance and then stop.
- If the anti-pinch function is activated when the sunroof is closed by tilting, the sunroof will move in the tilting direction until it reaches the maximum tilting position.
- The anti-pinch function is to prevent large objects from being pinched when the sunroof is closed. If the closing of the sunroof is obstructed, the sunroof will stop moving and then immediately be opened slightly.

CAUTION

Do not operate the sunroof when the ambient temperature is below -20°C, at which the anti-pinch function of the sunroof may not be activated, resulting in accidents. In addition, the low temperature will also damage the motor to a certain extent.

⚠ WARNING

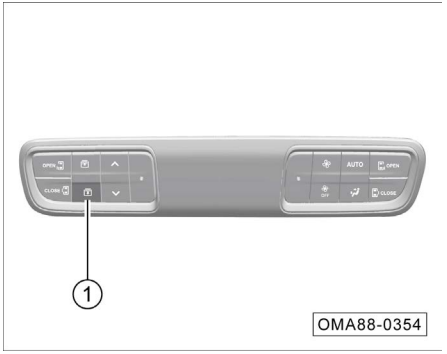
- **Be careful when closing the sunroof. Make sure that no one is within the movement range of the sunroof to avoid any pinching.**
- **The anti-pinch function of sunroof cannot prevent pinching of fingers or small objects.**
- **The sunroof will stop detecting obstacles at a position where the sunroof is about to be closed fully, so the anti-pinch function will be deactivated at this time.**
- **Do not try to activate the anti-pinch function by your hand or any part of your body, otherwise there will be a risk of pinching.**

Initialization of power sunroof

In some cases (such as a sudden power failure of the battery or after the vehicle has not been operated for a long time), it may be necessary to manually perform initialization and self-learning of the sunroof. Specific operations are as follows:

1. Push the switch ① forward to move the sunroof to the fully closed position.
2. Continue to push the switch ① forward to move the sunroof to the tilted position, then to semi-open position, and finally to the fully closed position.
3. Release the switch ① to end the sunroof initialization.

Initialization of power sunshade



- Press the button ① to move the power sunshade to the fully closed position.
- Continue to press and hold the button ① to move the power sunshade to the semi-open position and finally to the fully closed position.
- Release the button ① to end the power sunshade initialization.

CAUTION

If the power window system fails, please go to the GAC Motor authorized shop for inspection in time.

4.2.9 Basic operation of body anti-theft system

Body anti-theft function - unlock

When the START/STOP button is in the “OFF” position and the anti-theft system is activated, if you bring the smart key to approach the doors and unlock the vehicle or activate the intelligent active unlock function via the smart key, the doors will be unlocked, the anti-theft system will be deactivated, and the turn signal lamp will flash twice.

Body anti-theft function - lock

When the START/STOP button is in the “OFF” position and the four doors, hood and liftgate are closed, if you take the smart key away from the vehicle and lock the vehicle or trigger the intelligent active lock function with the smart key, all doors will be locked, the anti-theft system will be activated, and the turn signal lamps will flash once.

Activation of body anti-theft function

When the START/STOP button is in “OFF” position and the anti-theft system will be activated, if the door is unlocked by an illegal key or other illegal means forcibly, the anti-theft system will be activated, the anti-theft horn will sound and the turn signal lamps will flash.

If you unlock the driver door with the emergency mechanical key and open the driver door with the vehicle locked and the anti-theft system activated, the anti-theft system will trigger the sounding of horn and the double flashing of turn signal lamp for alarm.

NOTE

Before or during the anti-theft alarm is triggered, if you press the button on the remote control key or set the START/STOP button to the “ON” position, the anti-theft alarm will be disabled and the vehicle will be released from the anti-theft state; the alarm can be triggered up to 10 times in one cycle.

Engine immobilizer

When the START/STOP button is set from the “OFF” position to the “ON” position with the body anti-theft state released and the legal key in the vehicle, if the engine immobilizer system passes the verification, it will be deactivated.

If the engine immobilizer system does not pass the verification, the engine cannot be started and an immobilizer alarm will be triggered.

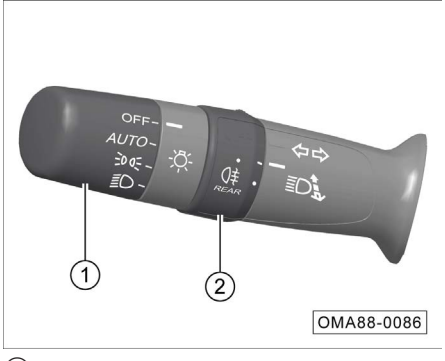
Body anti-theft maintenance instructions

No maintenance is required during normal use. If you have any doubt, please contact the GAC Motor authorized shop.

4.3 Lamps and vision

4.3.1 Exterior lamps

Lamplight combination switch

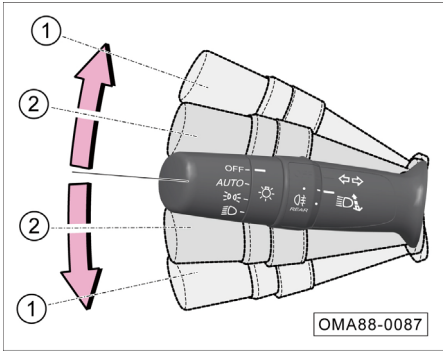


① Lamplight switch
② Rear fog lamp switch

i NOTE

- Water vapors or even water drops may appear on the inner surfaces of the lamps under certain conditions (such as high air humidity and vehicle washing conditions), similar to the fogging phenomenon on the windows when the vehicle is traveling in the rain, but this is not a malfunction.
- This fogging phenomenon can be eliminated by parking the vehicle in a dry environment, turning on the lamps or driving the vehicle, but may recur.
- If there are a lot of water drops or water ingress in the lamps, please contact the GAC Motor authorized shop for inspection.

Turn signal lamp



- When the START/STOP button is in “ON” position, if you turn the lamplight combination switch up or down to the limit position ① and turn on the right or left turn signal lamp, the corresponding indicator lamp ➡ or ⬅ on the instrument cluster will flash.

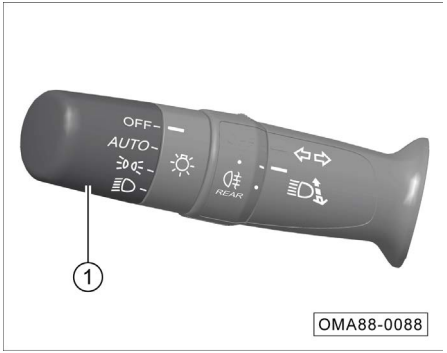
Turn signal lamp flashing for lane change

- In case of lane change or overtaking, if you turn the lamplight combination switch up or down to the position ② and then release it to the original position, the corresponding turn signal lamp and the indicator lamp ➡ or ⬅ on the instrument cluster will flash 3 times.
- If you turn the lamplight combination switch up or down and hold it at the position ②, the corresponding turn signal lamp and the indicator lamp ➡ or ⬅ on the instrument cluster will flash continuously. Releasing the switch to the original position can stop the flashing.

CAUTION

If the corresponding indicator lamp ➡ or ⬅ on the instrument cluster flashes faster, one turn signal lamp may be faulty. In that case, please go to the GAC Motor authorized shop for inspection in time.

Lamp switch



When the START/STOP button is in “ON” position, turn the lamplight switch ① to activate or deactivate AUTO (automatic headlamp on/off function), ≡D (position lamp), and ≡D (low beam).

When the lamp switch is turned to the “OFF” position, all lamps will go out.

AUTO (automatic headlamp on/off function)

- Turn the lamplight switch to the AUTO position to activate the automatic headlamp on/off function.

NOTE

If the automatic headlamp on/off function is activated, the vehicle will automatically turn on or off the headlamp according to the ambient light. When the external natural light gradually becomes dark, the position lamps and the low beam will be turned on simultaneously; when the external natural light gradually becomes bright, the position lamps and the low beam will be turned off simultaneously.

CAUTION

- If the message “Sensor failure; please manually control light” appears on the instrument cluster display, the system will keep the low beam on for the sake of safety. In that case, you should manually control the light and go to the GAC Motor authorized shop for inspection in time.
- The automatic headlamp on/off function may be affected in the haze environment, so please manually control the light in this case.

Daytime running lamp

- When the engine is started and the low beams are off, the daytime running lamps will be automatically turned on; when the low beam are turned on or the engine is shut down, the daytime running lamps will be automatically turned off.

Position lamp

- If you turn the lamplight switch to position, the position lamps, instrument panel lamps, license plate lamps and other lamps will be turned on, and the corresponding indicator lamp on the instrument cluster will come on.

NOTE

If you forget to turn off the position lamps when the START/STOP button is turned to “OFF” position and the vehicle is not locked, the position lamps will stay on for 15 min and then go out automatically in order to save the battery power; when the START/STOP button is turned to “OFF” position and the vehicle is locked, the position lamps will go out immediately.

⚠ WARNING

- **When driving the vehicle at night or on a road with poor visibility, please do not only turn on the position lamps. Otherwise, accidents may easily occur.**
- **At night or in poor visibility road environment, when the vehicle stalls and is stopped for a short time, it is necessary to indicate the position of the vehicle by lamps. As the position lamps feature the electricity-saving function, do not use the position lamps as parking lamps. Please turn on the hazard warning lamps for warning.**

Low beam

- Turn the lamp switch to the position to turn on the low beam.

High beam

- After turning on the low beam, if you push the lamplight combination switch forward to the limit position, the high beam will be turned on and the corresponding indicator lamp on the instrument cluster will come on.
- If you pull the lamplight combination switch backward to the original position, the high beam will be turned off.

High beam flashing

- If you pull the lamplight combination switch backward to the limit position, the high beam will be turned on.
- If you release the switch, the lamplight combination switch will automatically return to its original position and the high beam will be turned off.

NOTE

- The high beam may cause dazzling to drivers of oncoming vehicles at close range, which may easily cause accidents. Therefore, please use the high beam reasonably.
- When all the lamps are turned off, if you pull and hold the lamplight combination switch backward, the high beam will stay on, and the corresponding indicator lamp on the instrument cluster will come on.

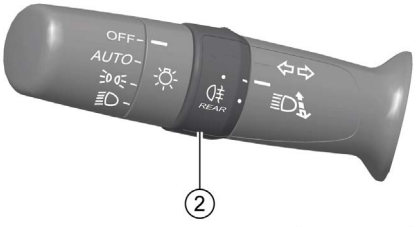
Lamp on warning

When the START/STOP button is set to the “OFF” position with the high beam or position lamps on, if you open the driver’s door, the system will send a buzzer sound and the instrument cluster display will display the message “Lamp On”.

Headlamp delay off (follow me home) function

The Follow Me Home function can be turned on via the AV system display. When the lamplight combination switch is in “AUTO” position, and the START/STOP button is in “OFF” position, if the ambient light is dark, the low beam will be on for about 30 s, and if any of the doors (including four doors, hood and liftgate) is opened within this 30 s, timing will start again, and the low beam will stay on for about 80 s, and if all the doors are closed within this 80 s, tining will start again, and then the low beam will be on for another 30 s...

Rear fog lamp switch



When the START/STOP button is in “ON” position with the position lamp turned on, turn the fog lamp switch ② to turn on or off the (rear fog lamp).

- Rotate the fog lamp switch ② to position and release it to “—” position, to turn on the rear fog lamp.
- Rotate the fog lamp switch ② to position and release it to “—” position, to turn off the rear fog lamp.

Hazard warning lamp

With the START/STOP button in any position, press the switch to flash the red indicator lamp on the switch and turn on the hazard warning lamp. Press the switch again to turn off the hazard warning lamp.

If the hazard warning lamp is turned on, all turn signal lamps and the indicator lamps and on the instrument cluster will flash simultaneously.

The hazard warning lamp shall be turned on in the following cases so as to attract the attention of persons on the road and reduce the risk of traffic accidents:

- The vehicle is involved in any failure.
- The vehicle is at the tail end of a traffic jam.
- The vehicle tows another vehicle or is towed.
- The vehicle is temporarily parked due to poor visibility.

NOTE

- The use of the hazard warning lamp will consume the battery power, so please turn it off when not in use.
- Be sure to strictly abide by the relevant regulations when using the hazard warning lamp.
- In the event of an emergency, if the hazard warning lamp is faulty, other methods that comply with the relevant traffic rules and regulations must be taken to attract the attention of persons on the road.

Vehicle assisted lighting

- If you press the unlock button on the remote control key within the effective range, the position lamps will stay on for auxiliary lighting for a period of time. If you press the unlock button on the remote control key again, the position lamps can stay on for a longer period of time. When the START/STOP button is set to the “ON” position, the position lamp will go out.

Vehicle locating lighting

- Press the lock button on the remote control key quickly twice, so the position lamps come on for several seconds and the turn signal lamps flash 3 times for the purpose of helping you locate your vehicle.

Exterior rearview mirror courtesy lamp*

- After any door is opened, the exterior rearview mirror courtesy lamp lights up automatically.
- After all doors are closed, the exterior rearview mirror courtesy lamp goes out automatically.

Intelligent courtesy function

When the START/STOP button is in “OFF” position and all doors are closed and locked, the vehicle can be unlocked/locked in the following ways to trigger the courtesy flowing effect of the front and rear combination lamps:

- unlocking/locking by remote control key.
- unlocking by approaching the vehicle with the remote control key.
- locking by walking away from the vehicle.
- automatic locking without door opening action in certain period of time after unlocking.

NOTE

The “Intelligent Courtesy Lamp” function can be set to ON or OFF via the AV system screen..

Light signal upon temporary stop

When the gearshift lever is moved to “P” position from another position, or AUTO HOLD is activated, or EPB is applied, the light signal upon temporary stop is triggered, and the rear position lamp lights up in a flowing effect for several seconds.

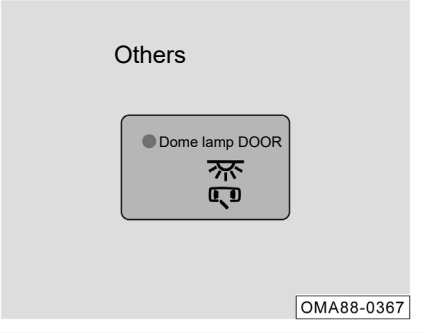
Once triggered, the light signal upon temporary stop will be triggered when the vehicle stops again after reaching the speed of 30 km/h.

NOTE

The light signal upon temporary stop function can be set to ON/OFF via the AV system display.

4.3.2 Interior lamp

Automatic turn-on function of dome lamps



- With the START/STOP button in “ON” position, access the driving control panel interface through the menu bar of the AV system, slide to the left, then click the soft key “Dome lamp DOOR” to turn on the automatic turn-on function of dome lamps; click the soft key again to turn off the automatic turn-on function of dome lamps.

Delay off function of interior lamps

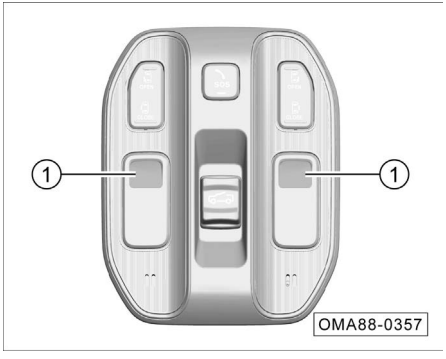
When the dome lamps are off and the automatic turn-on function of dome lamps is activated:

- With the START/STOP button in “OFF” position, the dome lamps will come on automatically if any door is opened, and go out about 30 s after the doors are closed.
- With the START/STOP button in “OFF” position, if any door is unlocked by remote control, the dome lamps will come on automatically and then go out after about 30 s.
- If the START/STOP button is set from the “ON” position to the “OFF” position, the dome lamps will come on automatically and then go out after about 30 s.

NOTE

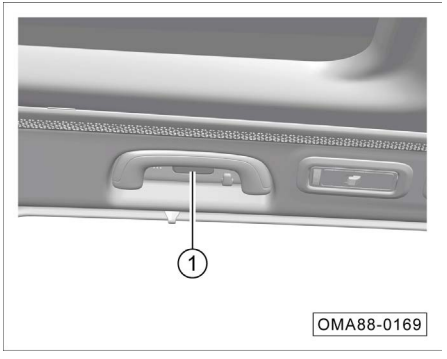
When all the doors are closed and the dome lamps are on as mentioned above, if the vehicle is locked by remote control or the START/STOP button is set to the “ON” position, the dome lamps will go out automatically.

Dome lamp



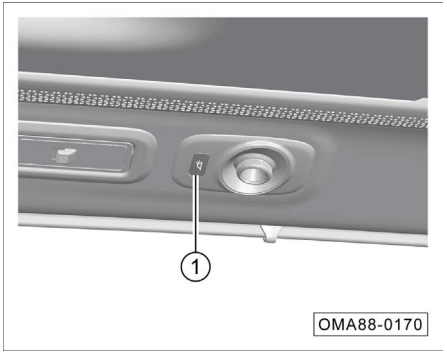
- When the dome lamps are off, press the switch ① to turn on the dome lamp on the corresponding side; press the switch ① again to turn it off.

Rear dome lamps



- When the rear dome lamps are off, press the switch ① to turn on the dome lamp on the corresponding side; press the switch ① again to turn it off.

2nd-row dome reading lamp



- When the 2nd-row dome reading lamp is off, press the switch ① to turn on the reading lamp on the corresponding side; press the switch ① again to turn it off.

Glove box lamp*

- If the glove box is opened, the glove box lamp will come on automatically.
- If the glove box is closed, the glove box lamp will go out automatically.

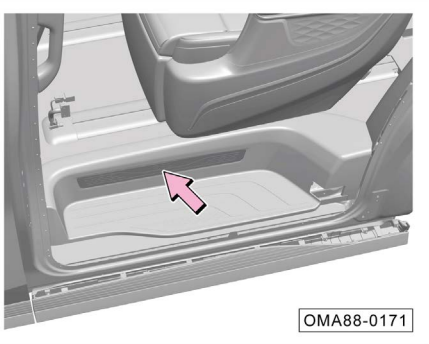
Trunk lamp

- If the liftgate is opened, the trunk lamp will come on automatically.
- If the liftgate is closed, the trunk lamp will go out automatically.

Vanity mirror lamp*

- If the vanity mirror cover is opened, the vanity mirror lamp will come on automatically.
- If the vanity mirror cover is closed, the vanity mirror lamp will go out automatically.

Rear courtesy lamp*

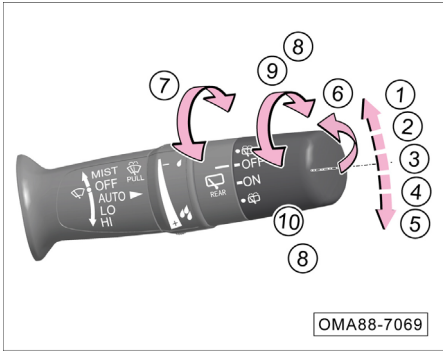


- When the sliding door is opened, the courtesy lamp will light up automatically.
- When the sliding door is closed, the courtesy lamp will go out automatically.

Ambient light*

Click “3D car model” in the main interface of AV system or “My Car” in the application menu to enter My Car interface, and then click “Lighting Effect→Ambient Light” to enter the interior ambient light effect setting interface, in which the ambient light can be set to ON/OFF and the ambient light effect can be adjusted.

4.3.3 Wiper combination switch



When the START/STOP button is in the “ON” position, the wiper combination switch can be operated as follows:

① MIST: manual wiping

② OFF: wiper off

③ AUTO: automatic wiping

④ LO: wiping at low speed

⑤ HI: wiping at high speed

⑥ Front windshield washer system on

⑦ Adjusting knob:

- Adjust the sensitivity of automatic wiping (AUTO)

⑧ : Rear windshield washer system on

⑨ OFF: rear windshield washer system or rear wiper off

⑩ ON: rear wiper on

MIST: manual wiping

- If the wiper combination switch is turned to ① MIST position, the front wiper will start wiping continuously.
- If the wiper combination switch is released to automatically return to ② OFF position, the front wiper will stop wiping.

OFF: Wiper off

- If the wiper combination switch is turned to ② OFF position, the front wiper will stop wiping.

AUTO: automatic wiping

- If the wiper combination switch is turned to the ③ AUTO position, the automatic wiping function will be activated, and the wiper system will adjust the wiper speed according to the current rainfall and the real-time vehicle speed.
- Turn the knob ⑦ up/down to adjust the wiper sensitivity. From top to bottom, the wiper sensitivity to rain drops is increased gradually.

LO: Wiping at low speed

- If the wiper combination switch is turned to ④ LO position, the front wiper will wipe at a low speed.

HI: Wiping at high speed

- If the wiper combination switch is turned to ⑤ HI position, the front wiper will wipe at a high speed.

Front windshield washer system on

- If the wiper combination switch is turned toward the rear of the vehicle to ⑥ position, the front washer will start spraying water and then the front wiper will start wiping.
- The front windshield washer system will be turned off and the front wiper will continue to work for about a few seconds when the wiper combination switch is released and returns to the original position.
- After the front wiper stops for several seconds, it will wipe once again so as to clear the residual water stains from the glass.

Rear windshield washer system on

- If the rear wiper knob is turned up/down to ⑧ position, the rear windshield washer system will be turned on, that is, the washer will start spraying water and then the rear wiper will start wiping.

ON: rear wiper on

- If the rear wiper knob is turned to ⑩ ON position, the rear wiper will start wiping.

OFF: Rear windshield washer system or rear wiper off

- If the rear wiper knob is turned to ⑨ OFF position, the rear windshield washer system will be turned off or the rear wiper will stop wiping.

CAUTION

- Before activating the automatic wiping function in winter, please check whether the wiper blade is frozen.
- The automatic wiping function is an assistance function, so the driver should manually operate the wipers when necessary according to the driving situation to ensure driving safety.

4.3.4 Windshield

Windshield glass

The front windshield is made of green soundproof* glass.

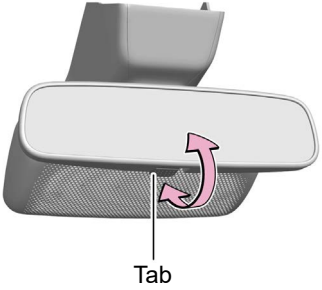
⚠ WARNING

- **Always keep the glass surface clean.**
- **Please affix the necessary identifications according to local traffic laws, rules and regulations. Do not stick paper or hang objects on the surface of the front windshield glass, otherwise the front view will be obstructed, which may easily cause traffic accidents.**

4.3.5 Rearview mirror

Interior rearview mirror

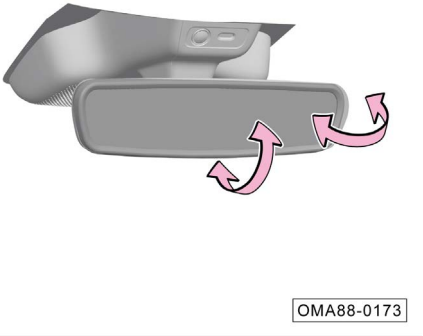
Manual anti-glare interior rearview mirror*



The interior rearview mirror can be adjusted manually to reduce the light reflected off the mirror surface, thus realizing the optimal rear view.

- As shown in the figure, the tab is at a rearview normal position, which can be pulled forward to offset the light reflected off the mirror surface to achieve the anti-glare function.
- Push the tab backward to return to the normal rearview angle.

Auto dimming interior rearview mirror*

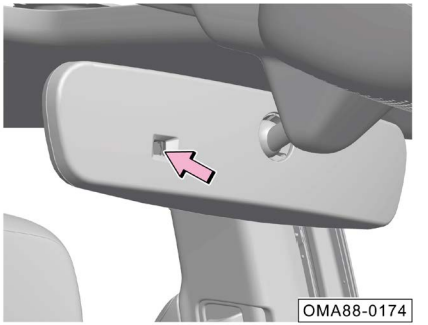


Auto dimming interior rearview mirror will monitor the intensity of rear light in real time and automatically adjust the mirror reflection effect accordingly so as to soften the strong light to be reflected into the driver's eyes.

- Before driving, be sure to adjust the interior rearview mirror to the appropriate angle.
- Hold the interior rearview mirror and adjust it up and down and left and right to the best rearview position.

CAUTION

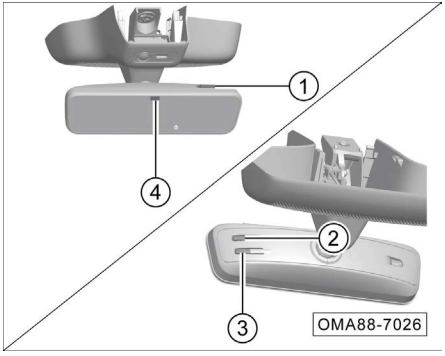
Do not adjust the interior rearview mirror during driving, so as to avoid danger due to loss of control of the vehicle caused by distraction.



CAUTION

To ensure that the auto dimming mirror sensor functions properly, do not cover the sensor as arrowed.

Streaming interior rearview mirror *



Compared with a conventional interior rearview mirror, the streaming rearview mirror features a wider field of vision, high-definition pictures, and narrowed blind spots of rear view, and thus avoids blockage of the field of vision of rear windshield by occupants or luggage, improving driving safety.

① Power/menu button

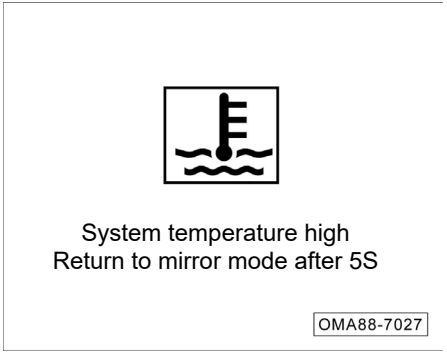
② "+" button

③ "-" button

④ Fault indicator lamp

Instructions for use of streaming interior rearview mirror

- When the START/STOP button is in "ACC" position, the streaming mode is turned on automatically, and pressing and holding the button ① can turn off the streaming function.
- Press the button ① to access the display brightness control option interface, and then press "+" button ② or "-" button ③ to adjust the display brightness.
- Press the button ① to access the display angle control option interface, and then press "+" button ② or "-" button ③ to adjust the viewing angle.
- Press the button ① to access the display size control option interface, and then press "+" button ② or "-" button ③ to adjust the viewing angle.



- When the streaming mode cannot be displayed normally due to high temperature, the fault indicator lamp flashes, and the icon and text reminder shown above appear on the screen of streaming interior rearview mirror.

Video fault
Return to mirror mode after 5S

OMA88-7028

- When the streaming mode cannot be displayed normally due to abnormal video transmission, the fault indicator lamp flashes, and the icon and text reminder shown above appear on the screen of streaming interior rearview mirror.

Exterior rearview mirror

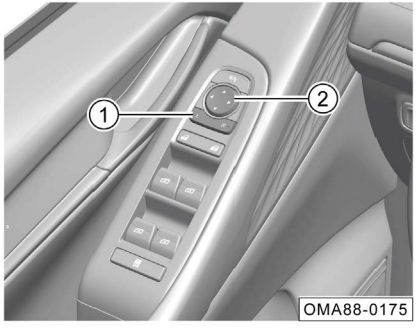
i NOTE

If the exterior rearview mirror fails, please go to the GAC Motor authorized shop for inspection in time.

⚠ WARNING

Although the curved (convex and spherical) rearview mirror can expand the field of view, the reflected object image is smaller and farther than the real object. Therefore, when changing the lanes, do not judge the distance between your vehicle and the following vehicle by the reflected image, otherwise accidents may occur due to wrong judgment.

Electric adjustment

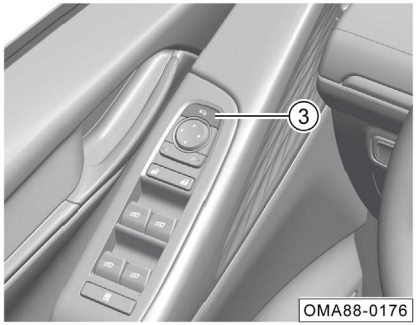


- Press “L” or “R” end of the selector button ① to select the left or right exterior rearview mirror.
- Press the adjusting button ② to adjust the selected exterior rearview mirror to the appropriate rearview angle.
- After adjusting the exterior rearview mirror, restore the selector button ① to its original state.

⚠ WARNING

Do not adjust the exterior rearview mirror during driving, so as to avoid danger due to loss of control of the vehicle caused by distraction.

Electric folding



- Press the folding button ③ to fold the exterior rearview mirror electrically.
- Press the folding button ③ again to unfold the exterior rearview mirror electrically.

Automatic folding

- When the vehicle is locked from the outside, the exterior rearview mirror will fold automatically.
- When the vehicle is unlocked from the outside, the exterior rearview mirror will unfold automatically.

i NOTE

The exterior rearview mirror automatic folding function can be activated or deactivated via the AV system.

CAUTION

- If the exterior rearview mirror does not feature the electric folding function or the electric folding function fails, the mirror can be manually folded and then manually unfolded. A click sound can be heard when the mirror is manually unfolded.
- Do not manually fold the rearview mirror with electric folding function frequently; otherwise the internal folding mechanism will be damaged and the electric folding function will fail.
- Be careful during electric folding of the exterior rearview mirror to prevent your fingers from being pinched by the rearview mirror and its base.

Reverse tilt-down*

Memory of turning down position of exterior rearview mirror when reversing:

1. Manual operation for storage of reverse tilt-down position:

- With the START/STOP button turned to “ON” position, select “Settings→Body Accessories→Other Accessories” on the AV system display, and activate the “Reverse Tilt-down” function.
- Depress the brake pedal and move the gearshift lever to “R” position.
- Adjust the corresponding exterior rearview mirror to a suitable position for reversing. After the adjustment, move the gearshift lever to another position, and then this position will be memorized as the reverse tilt-down position of the mirror.

2. Automatic operation for storage of reverse tilt-down position:

- With the START/STOP button turned to “ON” position, switch on the “Reverse Tilt-down” function on the AV system display.
- Click the soft key “Setting” for automatic angle adjustment of exterior rearview mirror, and adjust the exterior rearview mirrors on both sides to suitable reversing positions. After the adjustment, click the soft key “OK”, and then this position will be memorized as the reverse tilt-down position of the mirror.

The reverse tilt-down function is only a reverse assistance function for users, and is off by default. But, you can switch on the reverse tilt-down function and set the reverse tilt-down position in the AV system display. When the vehicle is shifted into “R” gear, the rearview mirrors on both sides will tilt down, and when the vehicle is shifted out of “R” gear, the mirrors will automatically return to the original position. If the reverse tilt-down function is switched off, the rearview mirror will not tilt down.

Defrosting and defogging function

Enter the main interface of front A/C control through the AV system display, and click the soft key ① to turn on / off the function. When the function is turned on, the button indicator lamp comes on.

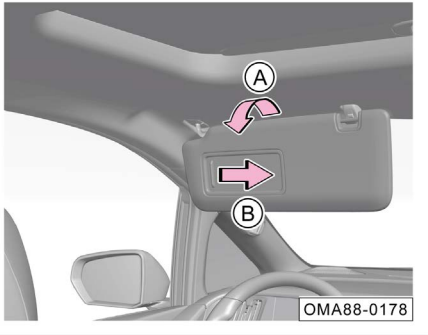
- The defrosting and defogging function can be activated to clear the fog or frost on the exterior rearview mirrors and the rear windshield.
- This function will be deactivated automatically after about 15 min or manually by pressing down the soft key , and then the button indicator lamp will go out.

CAUTION

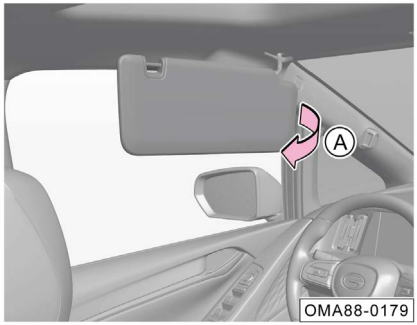
- If there is still any residual fog or frost to be cleared after the defrosting and defogging function is deactivated automatically, just press the button again.
- Do not use the defrosting and defogging function for a long time; otherwise the heater may be damaged due to overheating.
- When not needed, the defrosting and defogging function should be deactivated to avoid wasting battery power.

4.3.6 Sun visor/sunshade*

Front sun visor

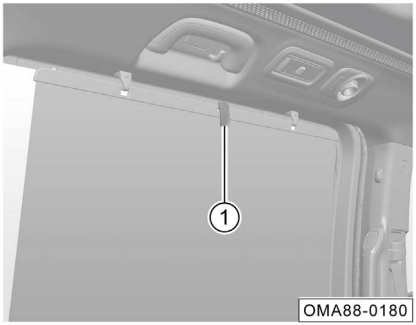


- Turn down the sun visor on the driver's side or front passenger's side in the direction of arrow A to shelter from the incoming sunlight from the front windshield.
- To use the vanity mirror, just turn down the sun visor and pull open the vanity mirror cover in the direction of arrow B. At the same time, the vanity mirror lamp* will automatically go on. When the vanity mirror cover is closed, the vanity mirror lamp* will automatically go out.



- After turning down the sun visor on the driver's side or front passenger's side, pull it out from the movable bracket in the direction of arrow C to shelter from the incoming sunlight from the side window.

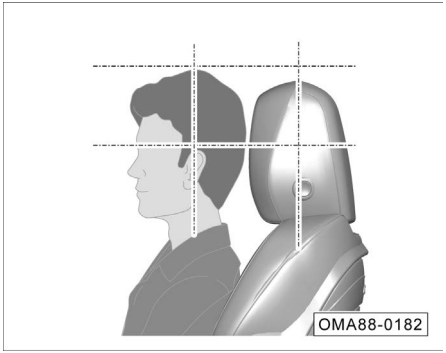
Rear side window sunshade *



- Lift up the handle ① and fix the side window sunshade on the door frame hook to block the sunlight from the side window.

4.4 Seats and storage facilities

4.4.1 Headrest



Correct adjustment of the headrests is essential to protecting occupants and reducing personal injuries in accidents.

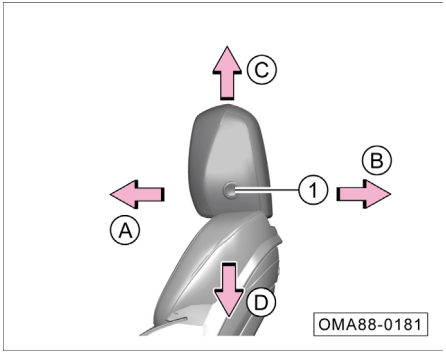
All occupants must adjust the headrests to the correct position (as shown in the figure) according to their body shapes.

⚠ WARNING

In order to reduce the risk of accidental casualties, please strictly observe the followings:

- **Do not adjust the headrest while driving.**
- **Always keep the headrest in its mounting position. If the headrest is removed or installed improperly during driving, the occupants may be seriously injured in an accident.**

Height adjustment of front passenger's seat headrest (for manual 4-way adjustable seat headrests)*



Forward and backward adjustment of headrest

- Press and hold the lock button ①, and push the headrest in the direction of arrow A or B to slide the headrest forward or backward.

Upward and downward adjustment of headrest

- Upward adjustment: Lift up the headrest directly to the desired position in the direction of arrow C.
- Downward adjustment: Press and hold the lock button ①, and press down the headrest to the desired position in the direction of arrow D.

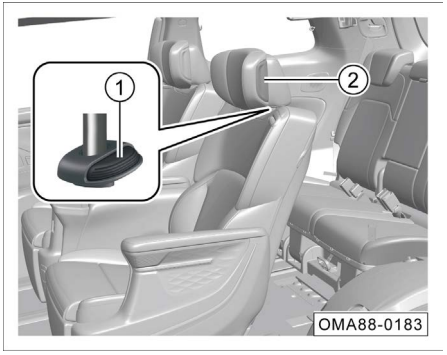
Height adjustment of front passenger's seat headrest (for manual 2-way adjustable seat headrests)*

- Downward adjustment: Press and hold the lock button ①, and press down the headrest to the desired position.
- Upward adjustment: Lift up the headrest directly to the desired position.

i NOTE

The adjustment method of rear seat headrests is the same as that of front seat headrests*.

Sleep headrest



- Downward adjustment: Press and hold the lock button ①, and press down the headrest to the desired position.
- Upward adjustment: Lift up the headrest directly to the desired position.
- Hold the handles ② on both sides of the headrest and pull the headrest forward to realize the forward adjustment of the front part of the headrest.

4.4.2 Front seats

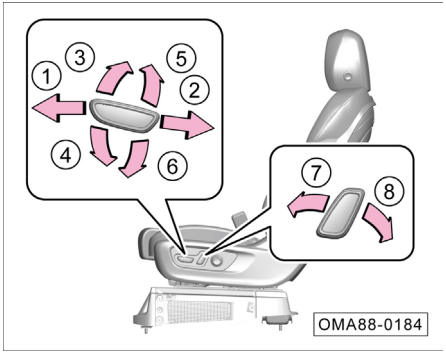
NOTE

When measuring the depth of the seat cushion, be sure to adjust the longitudinal position of the seat to the middle of the slider rail and the seat back to the normal operating state (25°).

WARNING

- **Do not place objects under the front seats, for these objects may be caught between the seat and the slider rail, hindering the seat from being locked.**
- **Please adjust the front seat only when the vehicle is in a stationary state, because incorrect sitting posture during the seat adjustment may easily cause casualties.**
- **Never leave children alone in the vehicle, because the power seat adjustment mechanism still works after the START/STOP button is turned to "OFF" position; if the children accidentally operate the power seat, an accident may occur.**

Power seat



Forward and backward adjustment of seat:

- Push the switch in the direction of arrow ① or ② to slide the seat forward or backward.

Upward and downward adjustment of front end of seat cushion (for driver's seat only):

- Pull the switch in the direction of arrow ③ or ④ to lift or lower the front end of the seat cushion.

Upward and downward adjustment of seat (only for driver's seat) :

- Pull the switch in the direction of arrow ⑤ or ⑥ to lift or lower the seat.

Forward and backward adjustment of seat back:

- Pull the switch in the direction of arrow ⑦ or ⑧ to recline the seat back forward or backward.

Manual seat *

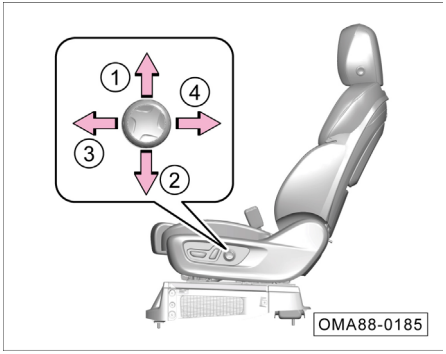
Forward and backward adjustment of seat:

- Pull up the adjusting handle in the direction of arrow ① to slide the seat forward or backward. Then release the adjusting handle, and slide the seat forward or backward slightly until the seat is firmly locked.

Forward and backward adjustment of seat back:

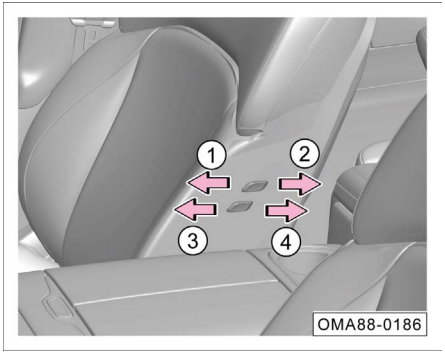
- Pull up the adjusting handle in the direction of arrow ② to adjust the seat back to a desired position, and then release the handle.

Adjustment of driver's seat lumbar support*



- Press the switch in the direction of arrow ①, ②, ③ or ④ for upward and forward support, and downward and backward retraction respectively.

Electric adjustment of front passenger's seat by rear passenger*



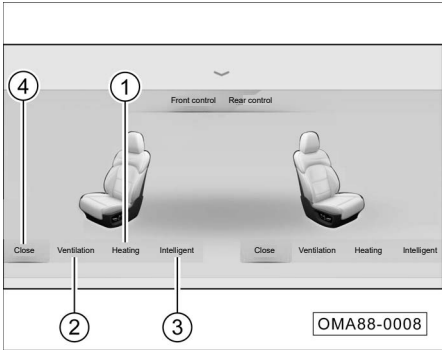
Forward and backward adjustment of seat back:

- Press the switch in the direction of arrow ① or ② to recline the seat back forward or backward.

Forward and backward adjustment of seat:

- Press the switch in the direction of arrow ③ or ④ to slide the seat forward or backward.

HVSM*



With the START/STOP button turned to "ON" position, click the soft key OFF/OFF at the right lower part of the AV system display, and then the seat ventilation/heating setting interface will pop up.

① Heating

- When you click "Heating", the seat heater will work in the 3rd heating level by default, and you can click the key 1/2/3 to adjust the heater to the desired heating level.
- The seat heater has three heating positions, among which the 3rd position has the highest temperature followed by the 2nd position, and the 1st position has the lowest temperature.

② Ventilation

- When you click “Ventilation”, the seat ventilator will work in the 3rd ventilation level by default, and you can click the key 1/2/3 to adjust the ventilator to the desired ventilation level.
- The seat ventilator has three ventilation positions, among which the 3rd position has the highest air volume followed by the 2nd position, and the 1st position has the lowest air volume.

③ Intelligent

- Click “Intelligent” to turn on the intelligent seat ventilation and heating mode.

④ Off

- Click “Off” to turn off the seat ventilation/ heating function.

CAUTION

- Do not kneel on the seat or apply pressure to a point on the seat cushion or seat back, in order to avoid damaging the electrical components in the seat.
- If you feel no temperature change of the seat or feel hot after turning on the heater for a long time, immediately turn off the seat heater and go to the GAC Motor authorized shop for inspection in time.
- If the seat fan is found inoperative after the seat ventilation function is turned on, please turn off the seat ventilation function immediately and go to the GAC Motor authorized shop for inspection in time.

WARNING

If you are sensitive to the temperature change of the seat heater function, please do not continue to use this function to avoid burns by the heater.

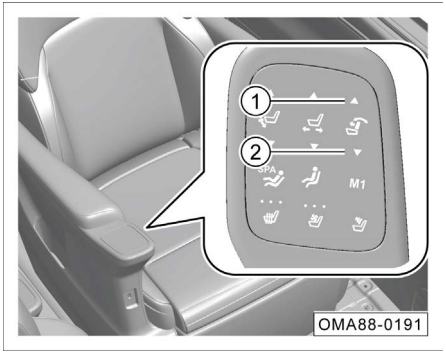
4.4.3 2nd-row/3rd-row seats

2nd-row seat adjustment

Manual forward and backward adjustment of seat*:

- Pull the adjusting handle as arrowed to slide the seat forward or backward. Then release the adjusting handle, and slide the seat forward or backward slightly until the seat locking mechanism is firmly engaged.

Electric forward and backward adjustment of seat back:

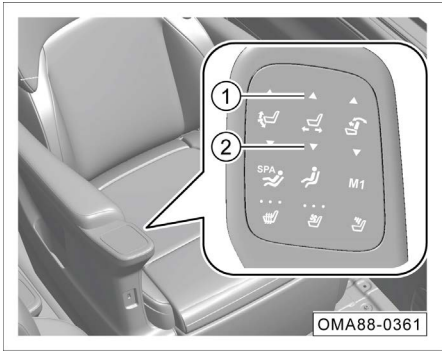


- When the panel is in working state (the character light is on), press the button ① or ② to adjust the seat back forward or backward; when the panel is in sleep state (i.e. the whole panel is off), it is necessary to press the panel to light it up before operation.

NOTE

During the seat back adjustment, it is necessary to avoid interference with the body trim panel; if the seat back needs to be adjusted to the maximum angle position, the seat needs to be slid to the foremost position.

Electric forward and backward adjustment of seat*:



- When the panel is in working state (the character light is on), press the button ① or ② to slide the seat forward or backward; when the panel is in sleep state (i.e. the whole panel is off), it is necessary to press the panel to light it up before operation.

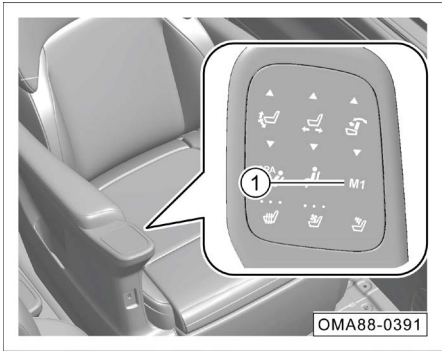
NOTE

- During electric forward and backward adjustment of the seat, if the seat is twisted on one side or cannot be adjusted, go to the GAC Motor authorized shop for inspection in time.
- When measuring the depth of the seat cushion, be sure to adjust the longitudinal position of the seat to the middle of the slider rail and the seat back to the normal operating state (25°).
- When getting on and off the vehicle, the rear passengers should pay attention to avoiding sharp objects (high heels, umbrellas, etc.) being inserted into the long slide rail groove. Especially when wearing high heels, avoid the risk of falling down due to insertion into the slide rail groove.

Adjustment of 2nd-row seat leg support

- When the panel is in working state (the character light is on), press the button ① or ② to support the leg support upward and forward * and retract the leg support downward and backward* respectively; when the panel is in sleep state (i.e. the whole panel is off), it is necessary to press the panel to light it up before operation.

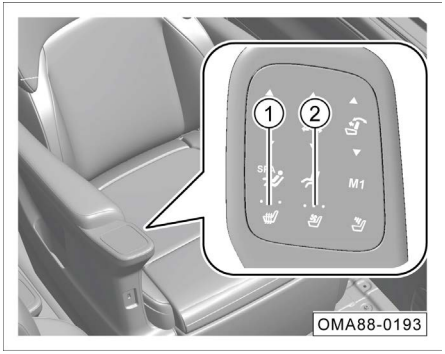
2nd-row seat position memory *



- Adjust the seat to a suitable position, press and hold the button ① to memorize the current seat position, and press the button ① to call the memorized seat position.

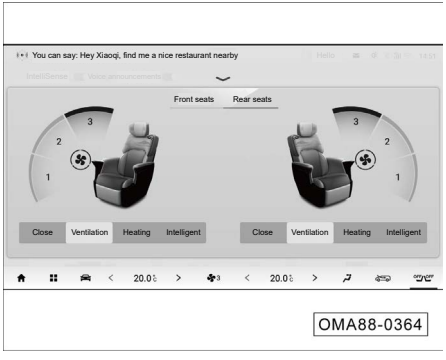
2nd-row seat heating/ventilation

1. Rear seat armrest panel switch control



- Turn the START/STOP button to “ON” position.
- When the button ① is pressed, the button indicator lamp lights up and the seat on the corresponding side starts to heat up.
- When the button ② is pressed, the button indicator lamp lights up and the seat on the corresponding side starts ventilation.
- Each press on the button changes the position once, and the position changes in the cycle of “OFF-3-2-1-OFF”.

2. Control of front AV system through soft key



- With the START/STOP button in “ON” position, click the soft key OFF OFF at the right lower part of the AV system display to access the seat ventilation and heating interface, and click “Rear Seat”. The operation method is consistent with that of the front seat ventilation/heating switch.
- The seat heater/ventilator has three positions, among which the 3rd position has the highest temperature/air volume followed by the 2nd position, and the 1st position has the lowest temperature/air volume.

CAUTION

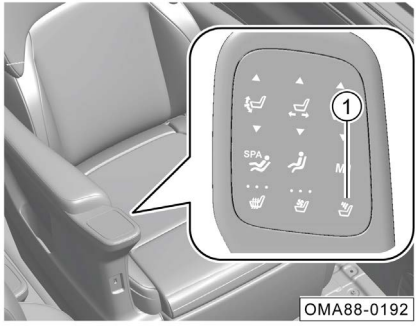
- Do not kneel on the seat or apply pressure to a point on the seat cushion or seat back, in order to avoid damaging the electrical components in the seat.
- If you feel no temperature change of the seat for a long time or feel hot after turning on the heater, please immediately turn off the seat heater and go to the GAC Motor authorized shop for inspection in time.

WARNING

If you are sensitive to the temperature change of the seat heater function, please do not use this function to avoid burns by the heater.

2nd-row seat massage function

1. Rear seat armrest panel switch control

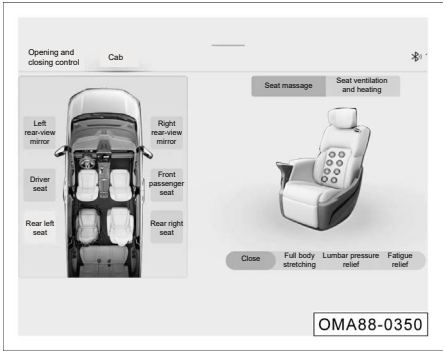


- With the START/STOP button in “ON” position, press the button ① to turn on the seat massage function; press the button again to turn off the massage function.

NOTE

If not turned off manually by the button ①, the seat massage function will automatically stop 15 min after being turned on; press the button ① again to turn it on again.

2. Control of front AV system through soft key



Access “My Car” interface through the front AV system application menu, and click “Cabin → Left/Right Rear Seat” soft key to access the 2nd-row seat control interface:

- Massage mode: off, full body stretching, waist pressure relief, fatigue relief.
- Click the corresponding soft key, and the seat massage function will work according to the corresponding mode.

One-button SPA for 2nd-row seat*

- With the START/STOP button in “ON” position, press the button ①, and then the indicator lamp will light up, and the one-button SPA function will be activated to work with the functions such as ambient light, seat reclining, massage, etc. to create a comfortable atmosphere of SPA for the second row of passengers. Press the button ① and then the indicator lamp will go out and the one-button SPA function will be deactivated and return to the state before activation.
- When the standard positions (or welcome position, one-button SPA position) of the 2nd-row left and right seats are inconsistent, adjust the seats forward or backward to the limit position and press and hold it for 1 s to restore the factory reset position.

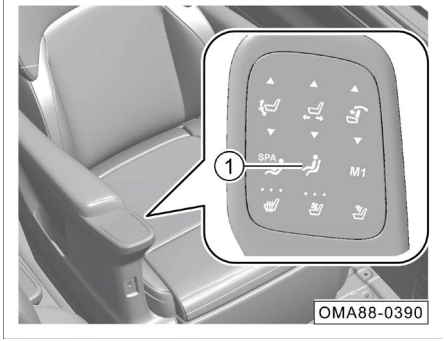
NOTE

Before the one-button SPA function is turned on, please confirm the space in the front row and the third row in advance, and beware of being pinched.

2nd-row seat welcome function *

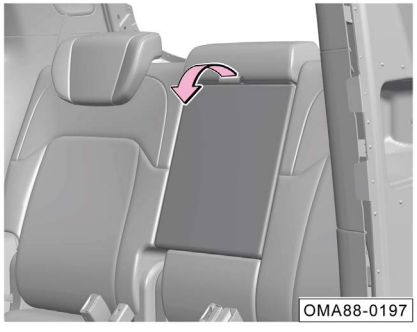
With the START/STOP button in “ON” position, the second-row seat welcome function can be set to ON/OFF via the AV system display.

One-button reset of 2nd-row seat *



Press the reset button ①, and the horizontal position, back and leg support of the 2nd-row seats will be reset to the initial positions. If there is a risk of leg pinching during the reset process, you can press either the seat horizontal adjustment button, the seat back reclining button or the leg support adjustment button to stop the seat reset action.

Central armrest of 3rd-row seat

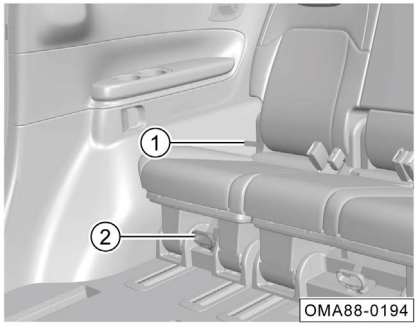


- Open the central armrest of 3rd-row seat as arrowed.

NOTE

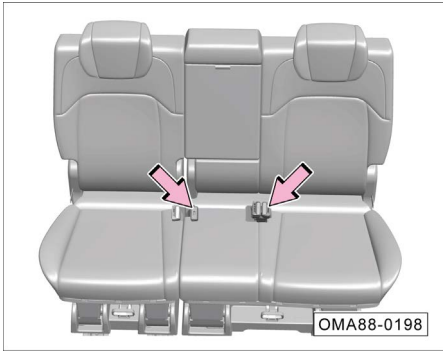
The central armrest shall not be seated by anyone, and shall be stowed to the seat back if the seating position needs to be used.

3rd-row seat adjustment

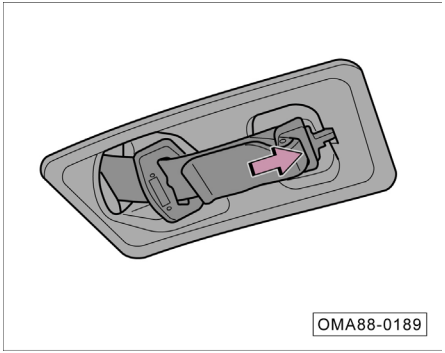


- Pull the cable ① forward to adjust the seat back forward or backward.
- Pull up the adjusting handle ② to slide the seat forward or backward. Then release the adjusting handle, and slide the seat forward or backward slightly until the seat locking mechanism is firmly engaged.

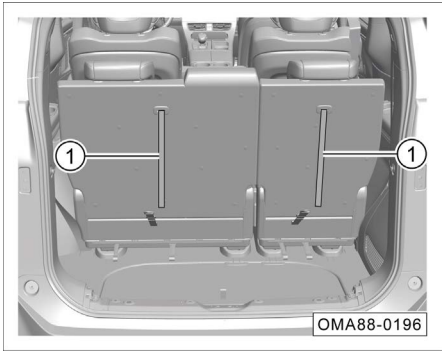
3rd-row seat folding down



- Unbuckle the 3rd-row center seat belt => See page 22 and slowly retract it into the fixing slot in the roof.



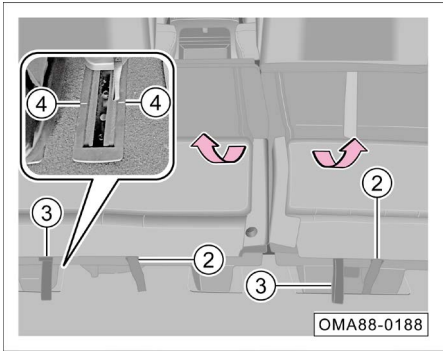
- Retract the seat belt into the fixing slot in the roof.



- Lower the 3rd-row seat headrests to the lowest position.
- Pull up the seat back reclining switch cable ① to unlock the seat back and fold it forward.

i NOTE

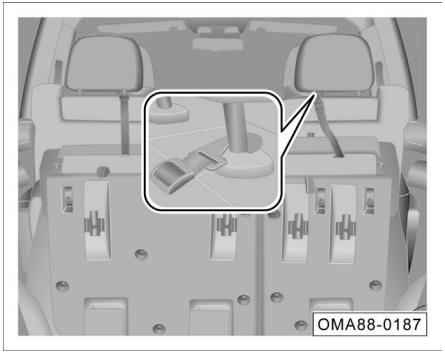
There are also cables under the side of the seat, which act the same as cable ①.



- To obtain more storage space in the trunk, you may fold the seat back, pull the unlocking slide rail strap ② to adjust the slide rail, and push the seat forward until the folding transfer printing identifications ④ can be seen. Pull the cable ③ behind the seat cushion and fold the 3rd-row seats as arrowed.

NOTE

The 3rd-row seats are independent 60/40-split folding seats, which can realize diversified storage space combinations.



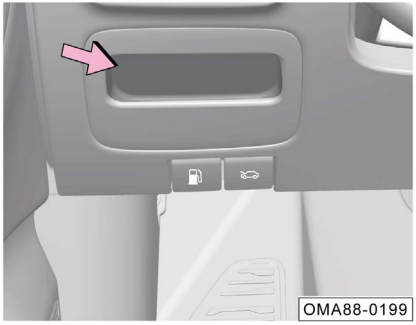
- Secure the fixing hook at the 2nd-row seat headrests.
- Release the fixing hook and slowly fold down the seat until it is locked into the buckle. Lift the seat back and push it back to the upright position.

4.4.4 Storage facilities

Storage compartment on door interior trim panel

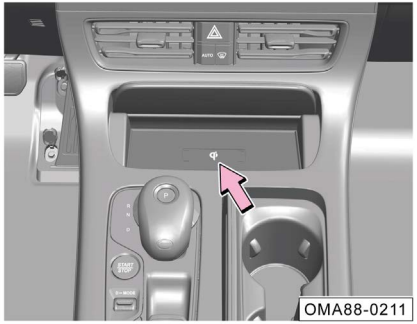
- Place beverage bottles, map manuals and other articles here.

Storage compartment on lower guard plate of cab



- Place small articles here.

Instrument panel front storage box



- Press to open the storage box cover automatically and place small articles.

NOTE

This area is used as the mobile phone wireless charging area, so be sure to deactivate the mobile phone wireless charging function before placing articles in it. => See page 131

Instrument panel lower storage box

- For placing books, ipad, etc.

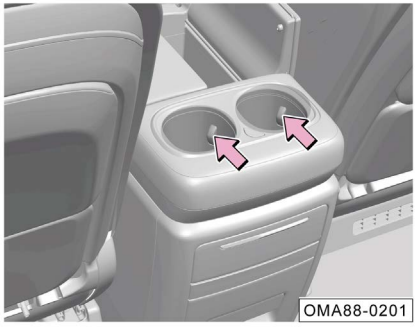
Cup holder

Front cup holder

- Press to open the front cup holder cover automatically and place beverage bottles.

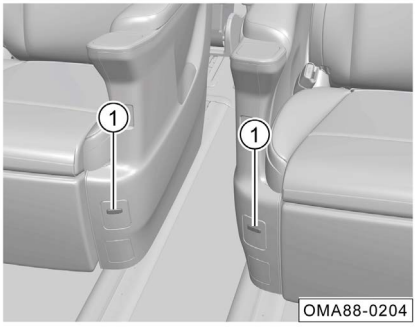
NOTE

The beverage bottles should be kept stable in the front cup holder, so as to ensure that the beverage will not be splashed near the buttons to prevent damage to internal electronic components.



2nd-row cup holder (behind armrest box)

- For placing beverage bottles.



2nd-row hidden cup holder

- Press the button ① under the 2nd-row seat to pop up the hidden cup holder for placing beverage bottles.

Sliding cup holder

- For placing beverage bottles.

3rd-row cup holder

- The 3rd-row cup holder is located on both sides of the 3rd-row seat, which can hold beverage bottles.

⚠ WARNING

Do not place hot beverages on the cup holder, or hot beverages may spill out during driving, scalding the occupants.

2nd-row side storage compartment

- For placing mobile phone.

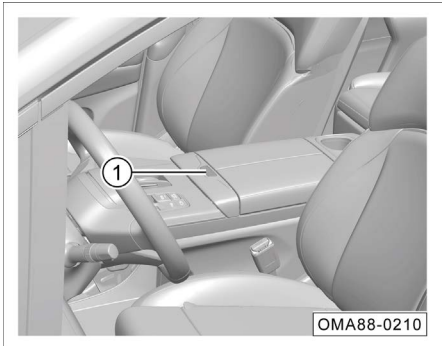
Front passenger's glove box

- Pull the handle to open the glove box and place articles such as file bags.
- Push back and close the glove box until you hear a "click" sound.

⚠ WARNING

The glove box must be closed when the vehicle is traveling, otherwise the articles in the glove box may fly out and cause injuries to the occupants in case of emergency braking or an accident.

Front central armrest box



- Press the switch ① to open the front central armrest box cover and place wallets and other articles.

Storage compartment on the back of front central armrest box

- Pull open the storage compartment as arrowed to place beverage bottles and other articles.
- Push close the storage compartment until you hear a "click" sound.

Storage bag on the back of front seat

- Pull backward and open the storage bag to place books, foldable umbrellas and other articles.

2nd-row tray table*

- Press the unlock switch ① to pop out a short section of tray table, and then pull up the tray table until it is flat.
- The tray table can be used to place cups and handle document signing and writing in the parking state.

CAUTION

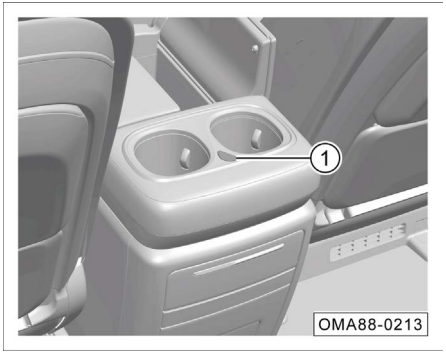
- Do not put your hands in the retracted position of the folding table, otherwise your hands may be pinched.
- The maximum load-bearing capacity of the tray table is 10kg, so please do not overweight it.

⚠ WARNING

The tray table can only be used when the vehicle is parked. It is strictly forbidden to use the tray table while the vehicle is running. Failure to follow this may result in death or serious injury to the occupants.

4.4.5 Cup holder with cooling/ heating*

On and Off



- With the START/STOP button in “ON” position, press the button ① to switch the mode in the order of “Heating → Cooling → Off”. When the heating or cooling function is turned on, the button indicator lamp will come on, and when the heating or cooling function is turned off, the button indicator lamp will go out.

i NOTE

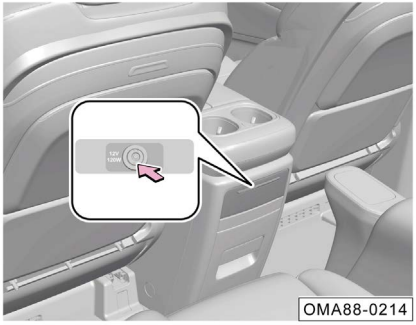
- Only the right cup holder has heating/ cooling function.
- The cup holder heating/cooling function is more for heat preservation, that is, cold drinks are heated more slowly, and hot drinks cool more slowly.

4.4.6 Power outlet/USB port

Front power outlet

- With the START/STOP button in the “ACC” or “ON” position, after the power outlet cover plate is opened, a device to be charged can be connected.

Power outlet on the back of central armrest box*



Press the cover to pop open it automatically.

With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for charging.

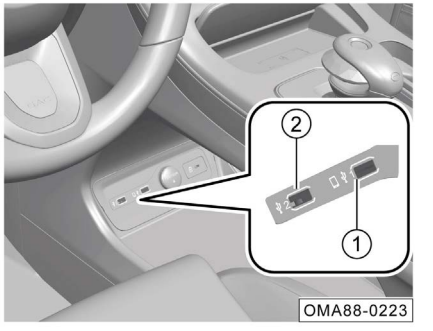
NOTE

Devices up to 12V/120W are supported.

NOTE

- Devices of 12V/120W or below supported.
- When the power outlet is connected to other adapters, it may cause interference to the key. Therefore, the remote control key should be kept away from the adapter interface and adapter, otherwise the key detection will be affected.

Front USB port



- With the START/STOP button in the “ACC” or “ON” position, a mobile device can be connected directly for use.

NOTE

- USB1 port ① supports charging, media playback and OTG (On-The-Go) functions.
- USB2 port ② supports charging and media playback functions.

Front TYPE-C port*

- With the START/STOP button in the “ACC” or “ON” position, a mobile device can be connected directly for use.

NOTE

The TYPE-C port is for charging only.

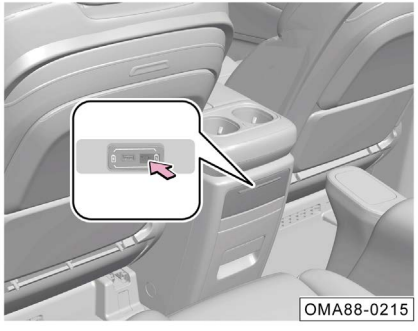
USB port on the back of central armrest box*

- Press the cover to pop open it automatically.
- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

The USB port on the back of central armrest box is for charging only.

TYPE-C port on the back of central armrest box*



- Press the cover to pop open it automatically.
- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

The TYPE-C port is for charging only.

USB port at 2nd-row left seat

- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

The USB port at 2nd-row left seat is for charging only.

TYPE-C port at 2nd-row right seat

- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

The TYPE-C port at 2nd-row right seat is for charging only.

CAUTION

- To avoid damage to the electrical system of the vehicle, never connect power generation equipment to a power outlet.
- Only use electrical equipment that complies with national electromagnetic compatibility regulations.
- Before turning on or off the START/STOP button, always disconnect the device connected to the power outlet to avoid damage to the electrical equipment due to voltage fluctuations.

WARNING

- **Never use the power outlet when nobody is in the vehicle. Improper use of the power outlet may easily cause a fire.**
- **Do not let children use the power outlet.**

USB port on the left side of 3rd-row seat

- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

The USB port on the left side of 3rd-row seat is for charging only.

USB port on the right side of 3rd-row seat*

- With the START/STOP button in the “ACC” or “ON” position, a device can be connected directly for use.

NOTE

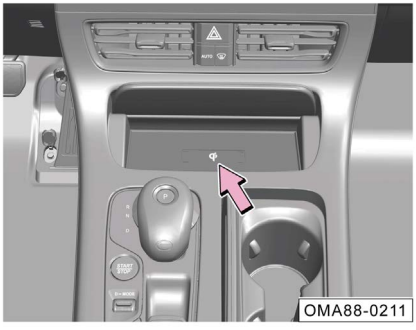
The USB port on the right side of 3rd-row seat is for charging only.

4.4.7 Mobile phone wireless charging system

The mobile phone wireless charging system utilizes electromagnetic induction to realize the charging of the mobile phone without the need for wire connections.

CAUTION

The mobile phone wireless charging system is only suitable for the Qi-certified mobile phones. GAC will not assume liabilities and losses for any accident caused by the use of mobile phones or other wireless charging receivers that have not passed the “Qi” certification.



The wireless charging effective zone is in the storage slot in front of the shift lever. To charge the mobile phone, please align its charging coil with the “Qi” logo to ensure the normal charging.

Mobile phone wireless charging switch

With START/STOP button in “ACC” or “ON” position:

- Method 1: turn on or off the mobile phone wireless charging system in the Settings interface of AV system display.
- Method 2: Click in the upper right corner of the status bar on the AV system display to turn on or off the mobile phone wireless charging system.

NOTE

After the mobile phone wireless charging system is turned on, the status of will change as the mobile phone wireless charging system is used. If you click the icon, the corresponding text message will pop up.

Symbol status

Symbol	Color	Status	NOTE
	Gray	Deactivation	The mobile phone wireless charging function is deactivated
	White or black	Standby	The mobile phone wireless charging function is activated, and please use the Qi-certified mobile phone.
	Green	Charging/ Fully charged	-
	Red	Charging failure	Please refer to "Mobile phone wireless charging failure" table.

Mobile phone wireless charging failure

Causes	Troubleshooting
The internal temperature of the wireless charging module is too high.	The temperature is too high, so please move away the mobile phone and make another attempt later.
There are metallic foreign objects in the wireless charging module area, or the mobile phone is not centered in the wireless charging module area.	There are metallic foreign objects or the mobile phone is placed improperly, so please clear the foreign objects and relocate the mobile phone.
The power supply voltage of the wireless charging module is too low or too high.	The voltage is abnormal, so please move away the mobile phone and make another attempt later.
The mobile phone request charging power is too high, or the wireless charging module transmit power is too high.	The power is abnormal, so please move away the mobile phone and make another attempt later.
The mobile phone status is abnormal.	The charging is interrupted, so please move away the mobile phone and make another attempt later.

NOTE

- GAC will not assume responsibility for any problem caused by abnormal use (such as the use of external wireless charging coil); if the product is disassembled or modified without any authorization, the free warranty service will be invalidated.
- Only one mobile phone can be charged at a time.
- On bumpy roads, the mobile phone wireless charging function may be intermittently discontinued. If the mobile phone deviates from the charging area and its charging stops, please move the mobile phone back to the charging area.
- The wireless charging function involves both the vehicle and the mobile phone, and if either of them is faulty, it may cause charging failure.
- The charging of the mobile phone may be discontinued when the temperature is too high, and will be continued after the temperature decreases.

CAUTION

- Do not sprinkle water in the storage box to avoid damage to electronic devices caused by water entering the WCM.
- Do not place heavy objects in the charging area to avoid damage to the mobile phone's wireless charging system.
- If the product is faulty and cannot be used normally, please stop using it and go to the GAC Motor authorized shop for inspection in time.
- If there is a metal foreign object between the mobile phone and the charging area during the wireless charging, do not remove the metal object immediately by hand for fear of finger scalding, You should turn off the wireless charging function immediately, then wait until the foreign object cools down before removing it.
- Do not sprinkle small objects such as small stones, silt, bread crumbs and paper scraps into the charging area, otherwise, unusual noise will be produced if they enter into the fan.

⚠ WARNING

- **Do not place anything between the mobile phone and the charging pad during the charging. Non-metallic articles will lead to a decrease in charging performance. Articles such as magnetic cards or chip cards may be damaged. Metal foreign objects such as keys and coins may be heated, bringing about driving safety hazards.**
- **To place metal foreign objects in the wireless charging zone, please first deactivate the wireless charging function through the corresponding menu on the AV system display to prevent the metal objects from sliding into the charging area and being heated during driving, which may cause hidden safety hazards.**
- **When the driver is not in the vehicle, please do not charge the mobile phone in the vehicle, so as to avoid unnecessary safety accidents.**
- **During driving, do not check the charging status of the mobile phone for a long time, for fear of traffic accidents.**

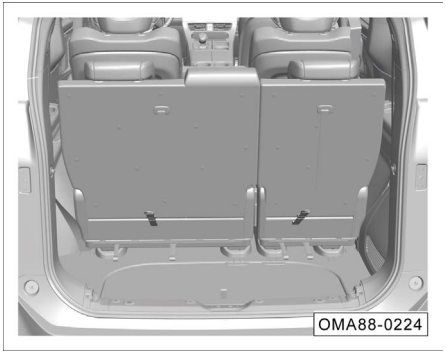
4.4.8 Trunk

In order to ensure the maneuvering stability of the vehicle, the luggage shall be placed as evenly as possible, and heavy objects shall be placed in the front of the trunk.

⚠ WARNING

- **The center of gravity of the vehicle carrying heavy objects may change. If heavy objects in the trunk suddenly slip, the maneuvering stability of the vehicle will change.**
- **Articles in the trunk must be fixed, otherwise they may fly forward and cause injuries to the occupants in case of emergency braking or an accident.**
- **Never place fragile, flammable and explosive articles in the trunk!**

Trunk volume



- Fold the 3rd-row seat to increase the trunk volume. => See page 119

CAUTION

When placing liquids in the trunk, make sure that the container is sealed and the liquid does not leak. Avoid placing liquids on the seat back folded down to prevent liquid leakage and thus wetting the seat.

4.4.9 Accessories and modification

Data labels and signs indicating important data and information about the use of the vehicle are affixed to the fuel tank cap, engine hood latch and other components of the delivered vehicle. Do not remove or damage these labels and signs, and always keep the data and information thereon legible.

The vehicle is designed with the latest safety technologies by GAC to ensure excellent active safety and passive safety. Therefore, in order to maintain the excellent characteristics of this vehicle, please be sure to consult the GAC Motor authorized shop before installing accessories or replacing parts.

It is recommended to use accessories and parts approved by GAC. Parts other than GAC ones are not covered by the warranty.

⚠ WARNING

Installing inappropriate accessories or modifying the vehicle may affect the maneuvering stability and other performance of the vehicle, and even may cause serious casualties.

To install a vehicle phone, alarm device, transceiver, low-power AV system, etc., ensure that they will not interfere with the electronic control unit such as anti-lock braking system (ABS) of the vehicle.

Before installing the accessories, please ensure that:

1 The accessories neither dim the lamps, nor affect the normal operation or performance of the vehicle.

2 For the vehicle equipped with side curtain airbags, the accessories must not be installed on the B pillar or across the rear door window. Because the installation in these areas will interfere with the normal function of the side curtain airbags.

i NOTE

As additions (such as headrest, seat cover, floor mat, sun protection mat, etc.) with inferior quality may contain VOCs that do not meet national standards, and may emit unusual odors, causing hidden dangers that affect the air quality in the vehicle, genuine quality additions are recommended to assure you a comfortable riding environment.

Modification of vehicle

Dismantling the parts from the vehicle or replacing the genuine parts with non-GAC Motor parts will seriously damage the maneuvering stability and reliability of the vehicle. For example:

- If larger or smaller wheels and tires are installed, they will interfere with the normal operation of the anti-lock braking system (ABS) and other systems.
- If the steering wheel and other safety devices are modified, system failures may occur.

⚠ WARNING

- **Improper modification of the vehicle or installation of inappropriate accessories may easily cause failures and accidents. The accessories and parts approved by GAC are always recommended, because the adaptability, reliability and safety of these accessories and parts have been strictly verified by GAC.**

⚠ WARNING

- **Improper modification or maintenance of the vehicle may weaken the protective effect of airbags, resulting in system failures and fatal accidents. The accessories such as beverage cup holder and mobile phone holder must not be installed or connected to the cover of the airbag assembly or within the working range of airbags.**
- **Improper operation or modification of the vehicle (e.g., modification of the engine, braking system, or components that affect the performance of wheels and tires) will affect the SRS's function, causing serious casualties.**
- **Do not install wheels and tires that are not approved by GAC.**
- **The modifications of the front and the engine compartment of the vehicle may weaken the function of the pedestrian detection system and violate road traffic regulations.**

4.5 A/C system

4.5.1 General description

The A/C filter can filter pollen and dust entering the air inlet of the A/C system.

The A/C filter must be regularly cleaned and replaced according to the Regular Maintenance Schedule in the *Warranty Manual*.

If the vehicle often runs in areas with poor air quality, the replacement interval of the A/C filter should be shortened. If the airflow from the A/C air outlet is not as smooth as usual, it may be caused by dirty and clogged A/C filter. In this case, clean or replace the A/C filter as soon as possible.

⚠ WARNING

If the air in the vehicle is foul, it will make the driver easily fatigued, lack of energy, and distracted, which is easy to cause an accident, resulting in personal injury or even death. Therefore, enable the air circulation mode according to the actual situation.

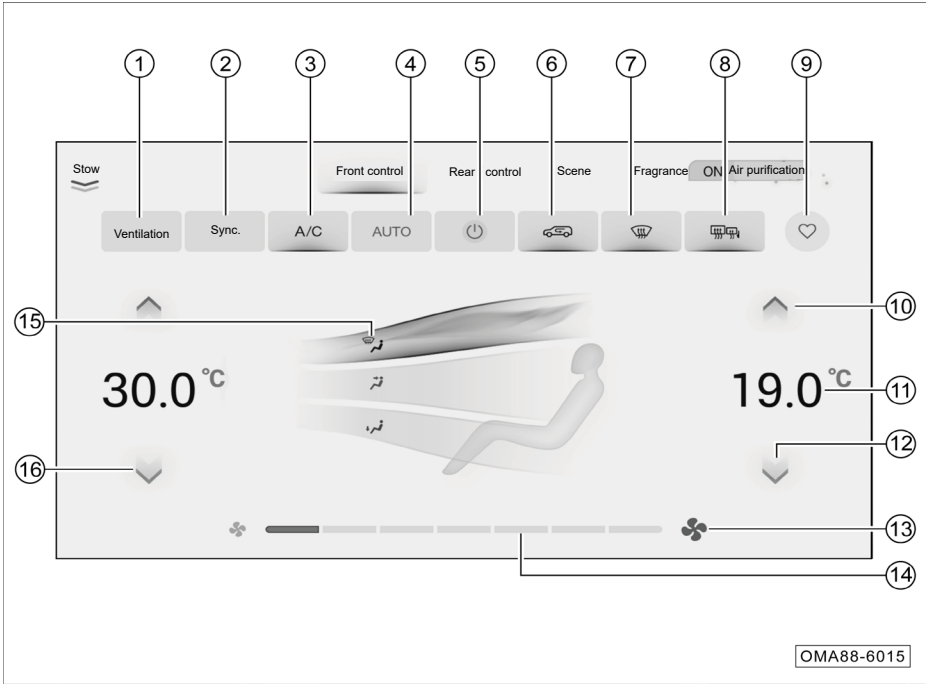
CAUTION

If the A/C system has failures (such as no cooling, odor in outlet air, etc.), please go to the GAC Motor authorized shop for inspection.

i NOTE

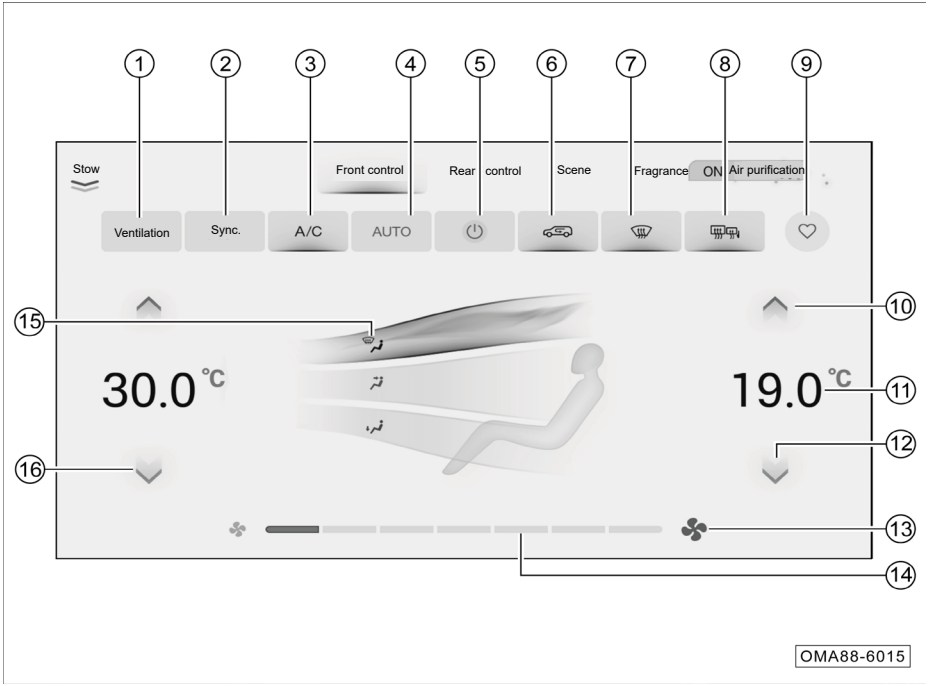
- When the START/STOP button is in “ON” position, the A/C system can be operated.
- When the A/C is turned on, there will be water dripped under the vehicle. Prolonged parking with the A/C on will cause accumulated water, which is normal.
- Regularly clean the front windshield wiper cover and remove snow, ice, and leaves to avoid clogging the A/C air intake and ensure normal air intake.
- The A/C system can achieve its maximum effect with the windows and sunroof closed. However, when the inside temperature is high under hot sun, open the windows briefly to dissipate the inside heat, and then enable the A/C for cooling.
- When the A/C is turned on, it is recommended to avoid opening the doors or windows for a long time to prevent the humid air outside the vehicle from condensing at the air outlet and forming condensed water. A small amount of condensed water is normal in hot and humid weather.

4.5.2 A/C system



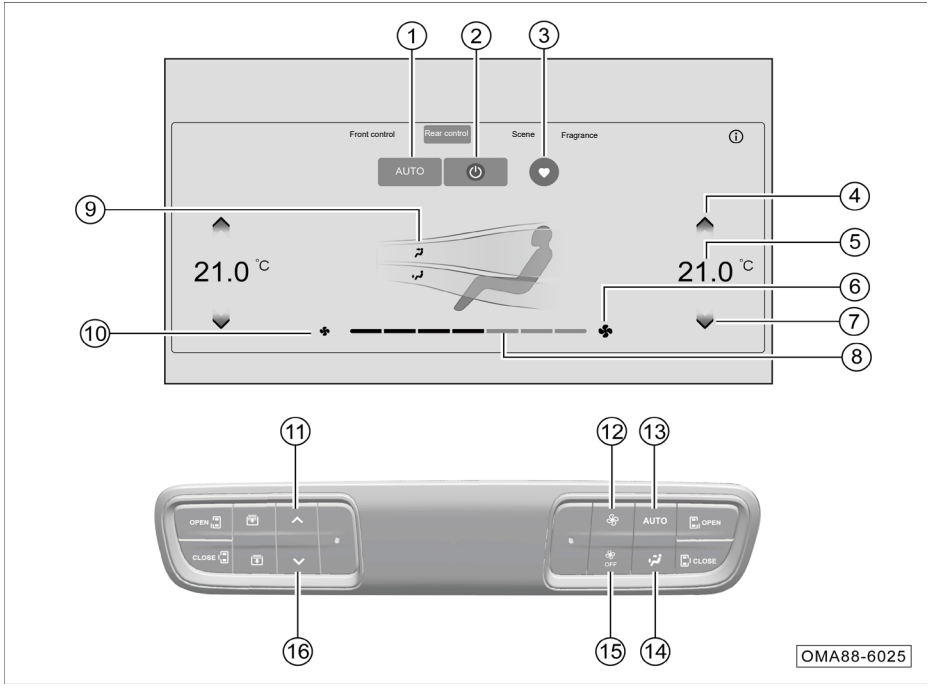
Description of front A/C control interface

① Ventilation soft key*
② “Sync” soft key
③ A/C soft key
④ AUTO mode soft key
⑤ ON/PFF soft key
⑥ Recirculation mode soft key
- Fresh air mode soft key
⑦ Front windshield defrost/defog soft key
⑧ Rear windshield and exterior rearview mirror defrost/defog soft key
⑨ Favorite key*
⑩ Temperature up soft key
⑪ Temperature display
⑫ Temperature down soft key



Description of front A/C control interface (continued)

⑬ Fan speed up soft key
⑭ Fan speed display
⑮ Air supply mode soft key
⑯ Fan speed down soft key

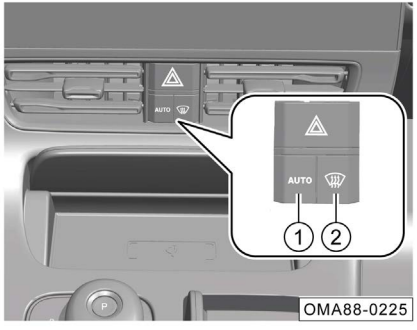


Description of front A/C control interface

① AUTO mode soft key
② ON/PFF soft key
③ Favorite key*
④ Temperature up soft key
⑤ Temperature display
⑥ Fan speed up soft key
⑦ Temperature down soft key
⑧ Fan speed display
⑨ Rear air supply mode soft key

⑩ Fan speed down soft key
⑪ Temperature up button
⑫ Rear fan speed up button
⑬ AUTO mode button
⑭ Air supply mode button
⑮ Fan speed down/off button
⑯ Temperature down button

A/C control buttons



① AUTO/OFF button
② Front windshield defrost/defog button

Temperature display

The temperature setting soft key on the front A/C interface of the AV system is used to set the target temperature of the left and right front areas, and the temperature values are respectively displayed on the display of the AV system.

The temperature setting button on the RCP and the temperature setting button on the rear A/C interface of the AV system can be used to set the rear temperature, which is displayed on the LCD of the rear A/C panel and the display of the RCP.

- Swipe the “TEMP” up and down on the AV system display to adjust the temperature in an increment/decrement of 0.5°C.

Temperature control button

- Click the ∧ or ∨ soft key on the AV system display to set the inside temperature. The temperature starts to scroll when the ∧ or ∨ soft key is pressed and held (for more than 0.5s), and stops scrolling when the button is released.
- The set temperature is adjustable within 18.5~31.5°C at an increment/decrement of 0.5°C. When the set temperature is lower than 18.5°C, the display will show LO, and when the set temperature is higher than 31.5°C, the display will show HI.

In AUTO mode, when LO/HI is displayed, the system will keep high air volume.

In AUTO mode, in order to obtain the most satisfactory inside temperature, it is recommended to set the temperature to 25.0°C, and adjust the temperature if necessary.

CAUTION

The temperature value displayed on the AV system display is the target value of temperature setting, not the actual measured value of the inside temperature.

A/C button

Click the A/C soft key on the AV system display to activate the cooling function of the A/C system.

Click again to deactivate the cooling function of the A/C system.

Fan speed setting

Click the / soft key on the AV system display or press the / button on the RCP to increase/decrease the fan speed by one level. The AV system display shows the corresponding fan speed level.

In AUTO mode, the A/C system can automatically control the fan speed, and the system status can be changed from AUTO mode to manual mode by operating the / soft key or / button.

Turning off the A/C

To turn off the A/C system, click the soft key on the AV system display, press the button on the RCP to reduce the fan speed until the A/C system is turned off; or press the "AUTO" button on the A/C control panel in the automatic mode.

After the A/C system is turned off:

- If the , or soft key on the AV system display is clicked, the A/C system will not be turned on.
- If the "Sync" soft key on the AV system display is clicked or the button on the RCP is pressed, it will not function.
- Click the soft key ∧/∨ , soft key , A/C soft key, soft key (fan speed +), soft key , and AUTO soft key on the AV system display, or press the AUTO button, button ∧/∨ or and button on the RCP to turn on the A/C system.

Air circulation

Repeatedly click the soft key , on the AV system display to switch the working mode of recirculation/fresh air damper between recirculation mode and fresh air mode.

- : Recirculation mode.
- : Fresh air mode.

CAUTION

- Long-term recirculation mode will cause accumulation of carbon dioxide in the vehicle, which is not conducive to keeping driver clearheaded.
- The recirculation mode in cold or rainy days can easily cause the windows to mist up, affecting the driver's visibility and probably causing serious accidents.

AUTO mode

If the AUTO soft key on the AV system display is clicked or the AUTO button on the RCP is pressed, the button indicator lamp will come on and the A/C system will enter the AUTO mode. The following functions will be automatically controlled according to the set temperature:

- Outlet air temperature.
- Air volume at air outlet.
- Air supply mode
- Air circulation mode*.
- Working state of A/C cooling function.

If the , , or soft key on the AV system display is clicked, or the / or button on the RCP is pressed, the AUTO mode will be deactivated.

Front windshield defrost/defog function

If the button on the FCP is pressed or the soft key on the A/C interface of AV system is clicked, the button indicator lamp will come on and the front windshield defrost/defog function will be activated

If the button is pressed again, the button indicator lamp will go out, the front windshield defrost/defog function will be turned off and the state before defrosting/defogging will be restored; or if the button is pressed, the AUTO mode will be activated and the front windshield defrost/defog function will be turned off.

CAUTION

- When the temperature is set to the lowest, the defrost/defog function may cause the outer surface of the windshield to mist up, affecting the driver's visibility and probably causing serious accidents. To use the defrost function, it is recommended to set the temperature to a hot or warm position.
- When using the defrost/defog function, if you manually turn off the A/C cooling function, it will cause the front windshield to mist up, affecting the driver's visibility and probably causing serious accidents.
- To use the defrost and defog functions, for quick defrosting and defogging, the default air volume level is higher than 5, and the noise of the air outlet is relatively large. If you want to reduce the noise, you can manually reduce the air volume on the premise of ensuring the driver's sight.

Rear windshield defrost/defog function

If the button on the AV system display is clicked, the rear windshield defrost/defog function will be activated, and the rear windshield and exterior rearview mirrors will be electrically heated.

If the button is clicked again, the rear windshield defrost/defog function will be deactivated. If you do not manually deactivate the rear windshield defrost/defog function, this function will be automatically deactivated after 15 minutes.

NOTE

- With the engine shut down, using the rear windshield defrost function for a long time will cause low battery voltage, making it impossible to start the engine.
- The rear defrost function is limited to ensure starting performance under low battery.

Air supply mode

Front air supply mode

Click the air supply mode button on the front A/C control interface of the AV display or in the resident toolbar at the bottom of the AV display to adjust the front air supply mode.

Switch the AV system to the A/C system control interface, click the soft key to switch the air supply mode manually; in the AUTO mode, the A/C system will automatically control the air supply mode, and when the soft key is pressed, the system will exit the AUTO mode.

When manually selecting through the front A/C control interface, click the soft key to switch cyclically according to the following air supply modes:

- Panel mode: Air flows out from the panel outlets.
- Panel/floor mode: Air flows out from the panel and floor outlets.
- Floor mode: Air flows out from the floor outlets.

- Floor/defrost mode: Air flows out from the front windshield defrost outlets and floor outlets.
- Defrost mode: Air flows out from the front windshield defrost outlets.

Rear air supply mode

Press the air supply mode button on the RCP or click the rear air supply mode soft key on the AV system display to control the rear air supply mode. The air supply mode is displayed on the RCP.

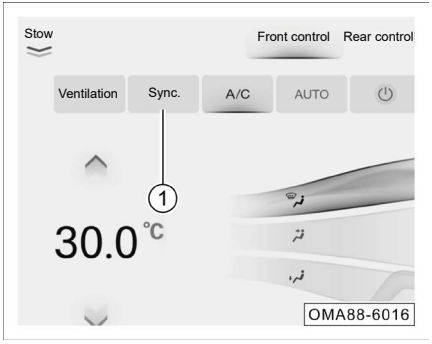
Operate the button to switch among the panel mode, panel/floor mode, and floor mode.

In AUTO mode, the air supply mode, as part of the automatic control logic, is automatically selected by the A/C system. The basic factor that affects the air supply mode is the outlet air temperature: when the outlet air temperature is high, most of the air will be directed through the floor outlets; when the outlet air temperature is low, most of the air will be directed through the panel outlets.

NOTE

- The panel/floor mode is mainly used when the ambient temperature is slightly lower than the cabin temperature in spring and autumn. Therefore, the temperature of the upper air outlets is slightly lower than that of the lower air outlets, which is normal.
- The air supply mode and the temperature and comfort curve can be adjusted for personal comfort.
- In order to ensure that the A/C system can effectively control all the air supply modes automatically, please keep all air outlets open.
- During cold start in winter, in the automatic mode, A/C system will start from the front windshield defrost/defog mode and enable a gradual transition to other modes.

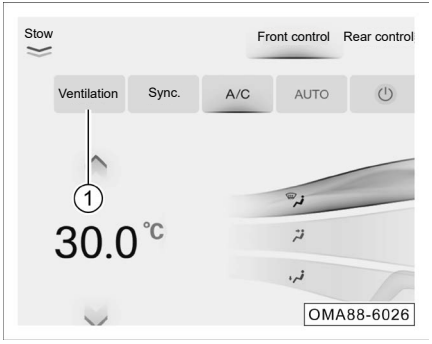
Sync mode



If the “Sync” soft key ① on the A/C interface of AV system is clicked, the indicator lamp will come on, and the sync mode will be activated; at this time, the A/C system will exit the three zone control mode and enter the single zone control mode, and the temperatures in all zones will be controlled simultaneously.

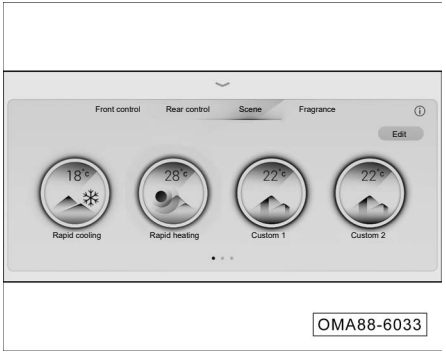
If the “Sync” soft key ① is clicked again, the button indicator lamp will go out; at this time, the A/C will enter the three zone control mode, and the temperatures in the front left and right zones and the rear zone will be controlled independently.

One-touch ventilation



Click the “Ventilation” soft key ① on the A/C control interface of the AV system display to turn on the ventilation mode.

A/C scene*



Switch the AV system to the A/C system control interface, and click the “Scene” soft key to enter the A/C scene interface.

1. Preset scene 1

- Fast Cooling: 18°C, AUTO: On, the A/C curve is “Fast”, and the temperature is rapidly decreased until the target temperature is reached.

2. Preset scene 2

- Fast heating: 28°C, AUTO: On, the A/C curve is “Fast”, the temperature is rapidly increased, and the maximum power is maintained until the target temperature is reached.

3. Add custom items

- Add the current A/C status as a custom scene as needed.

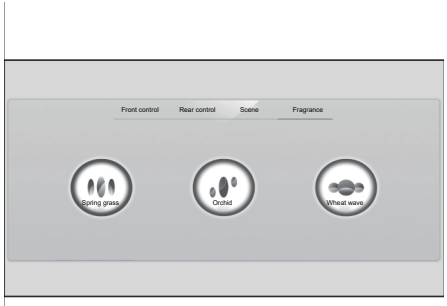
A/C fragrance*

The fragrance system, if turned on, can improve the air condition in the vehicle. The fragrance is released in a unique pulse pattern to avoid the olfactory habit.

Use conditions

1. It is recommended to turn on the A/C to improve the fragrance experience;
2. The temperature inside the vehicle is 10°C~28°C;
3. The fragrance box has been installed and is within service life;

Turning on/off the A/C fragrance



- With the START/STOP button in “ON” position, switch the AV system display to the A/C control interface, and click the “Fragrance” soft key to enter the fragrance control interface.
- Click to select the fragrance type to enter the corresponding fragrance control interface, where you can activate or deactivate the fragrance function and adjust the concentration of the fragrance.

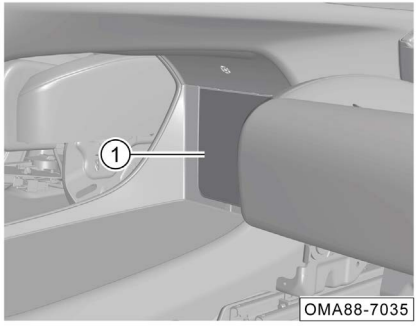
The following conditions may affect your experience of fragrance concentration:

- Opened sunroof, doors or windows.
- HVAC in fresh air mode.
- Temperature and humidity inside the vehicle.
- Fragrance box service life.
- Physical state, such as fatigue or hunger.
- When a certain fragrance is released for a long time and then switched to another fragrance, it may not be noticeable in a short time.

CAUTION

- If you click to apply a fragrance block which is about to be used up or has been used up, a text will pop up for reminding.
- When the fragrance block is used up, it is recommended to replace the fragrance block at a GAC Motor authorized shop.

Fragrance box



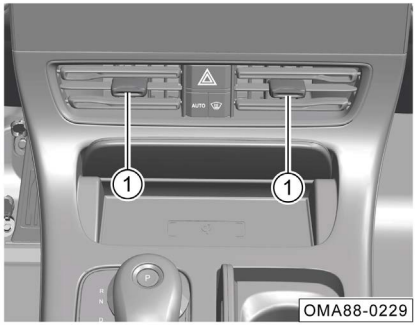
The fragrance box is installed inside the console, and the cover plate ① needs to be removed for its replacement. Therefore, it is recommended to get the fragrance box replaced at a GAC Motor authorized shop.

4.5.3 A/C air outlet

Panel left and right side air outlets

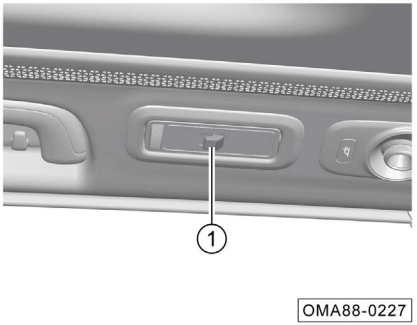
- Toggle the paddle ① to adjust the air direction or close the air outlet.

Panel central air outlet



- Toggle the paddle ① to adjust the air direction or close the air outlet.

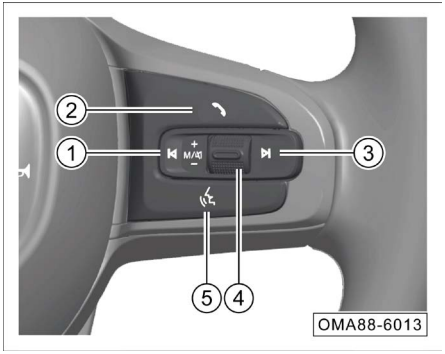
Roof air outlet



- Toggle the paddle ① to adjust the air direction or close the air outlet.

4.6 AVNT

4.6.1 Control buttons on the right of steering wheel



① ◀| button

- In radio mode, press this button to automatically search for a valid station with lower frequency. If a valid station is found, the automatic search will be stopped and the station will start playing.
- In media source playing mode, press this button to skip to the previous track.

② Answer call/hang up

- In case of an incoming call, press it to answer the call.
- In case of an incoming call, press and hold it to reject the call.
- During a call, press it to hang up the call.

③ |▶ button

- In radio mode, press this button to automatically search for a valid station with higher frequency. If a valid station is found, the automatic search will be stopped and the station will start playing.
- In media source playing mode, press this button to skip to the next track.

④ Audio source button/volume button/mute button

- Press this button repeatedly to switch as follows: FM→AM→DAB→ USB1→USB2→ Bluetooth Music→FM.
- Press and hold this button to mute the media source. In mute state, press and hold this button to unmute the media source.
- Toggle up/down this button to adjust the volume.

⑤ Voice button

- With the mobile phone connected to the AV system, after the CarPlay or EasyConnection function is switched on, press this button to activate CarPlay or EasyConnection voice function, and press this button again to deactivate the voice function.

4.6.2 Basic operation

① Smart card area
② Drop-down menu bar area
③ System status bar
④ Smart scene area
⑤ Bottom toolbar
⑥ Application menu interface

NOTE

- The AV system interface shown here is for reference only, and subject to the configuration of your vehicle.
- The protection function of the AV system may be triggered under high temperature conditions to dim the brightness of the display. The brightness can be restored after the temperature of the vehicle is lowered. This is a normal phenomenon.

Drop-down menu bar

In any other interface, swipe down from the top of the screen (drop-down menu bar) to show the drop-down menu. Click on ⌒ or swipe up to hide the drop-down menu bar. In the drop-down menu bar interface, if there is no operation, the drop-down menu will be automatically hid after a period of time.

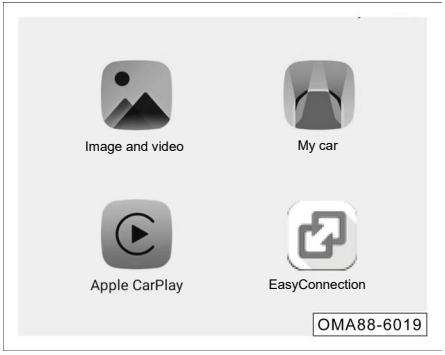
Click the function buttons in the drop-down menu bar to turn on/off the corresponding functions, or enter the corresponding function interfaces.

My Car

With the START/STOP button in “ON” position, click on “3D car model in smart scene” in the main interface or the “My Car” in the application menu interface to enter the My Car interface.

“Opening/closing control (sunroof, sunshade, windows, liftgate*, power sliding door)”, “Cabin (seat adjustment, rearview mirror adjustment, rearview mirror folding)”, and “Ambient light*” can be adjusted.

CarPlay



CarPlay allows you to use navigation function, make calls, send and receive messages, and enjoy music while focusing on driving.

Method 1:

- Use a USB cable to connect the phone and the USB port of the AVNT. After successful connection, the system will automatically switch to the CarPlay main interface, and the “Apple CarPlay” icon in the system interface will be highlighted.
- In other function interfaces, you can access the CarPlay by clicking on the Apple Carplay icon in the application menu.

Method 2:

- With the Bluetooth function of the phone activated, search for the phone name in the Bluetooth connection interface of the AVNT, and click the phone name. After successful connection, select CarPlay in the selection box interface for wireless connection.

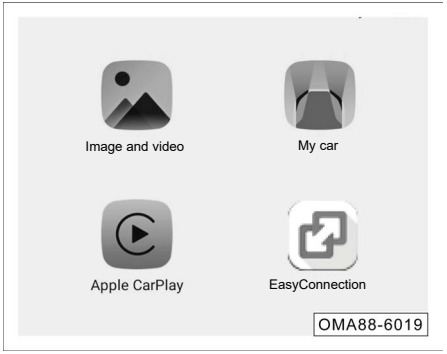
Operations for returning to AVNT system:

- Click on “GAC” icon in the CarPlay application menu interface to return to the AVNT system interface.
- Click on “Apple CarPlay” icon in the AV system application menu interface to access CarPlay system again.

NOTE

- For the functions and applications supported by CarPlay, refer to the Apple's official website. According to the information released by Apple in 2019, Apple CarPlay supports iPhone5 and above.
- When using CarPlay, make sure that the CarPlay function is enabled via "Settings → General → Access Restriction" on the iPhone, otherwise the iPhone will only be used as an iPod and the Apple CarPlay will not be available.
- Please use the genuine iPhone data cable, otherwise connection failure may occur.

EasyConnection



EasyConnection allows you to use navigation, make calls, enjoy music and achieve mirror linking while focusing on driving. If EasyConnection APP is not installed on the phone, search for EasyConnection APP in the app store of the phone or scan the QR code on the AVNT for downloading.

Method 1:

- For an Android phone supporting EasyConnection function, connect the phone to the USB port of the AVNT via a data cable, and click on the EasyConnection icon on the AVNT for automatic connection of EasyConnection.

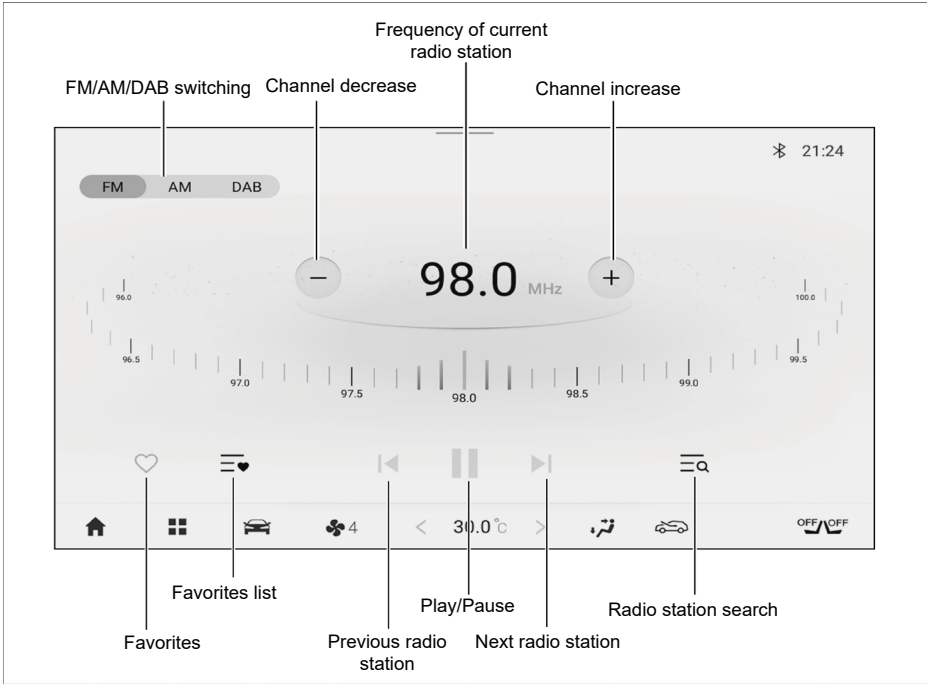
Method 2:

- Click on the EasyConnection icon to enter the connection interface, and scan the QR code with the phone for wireless connection.

Return to the AVNT system operation

- Click on the ⌂ icon in the EasyConnection system interface to return to the AVNT system.
- Click on "EasyConnection" icon in the AV system application menu interface to access EasyConnection system again.

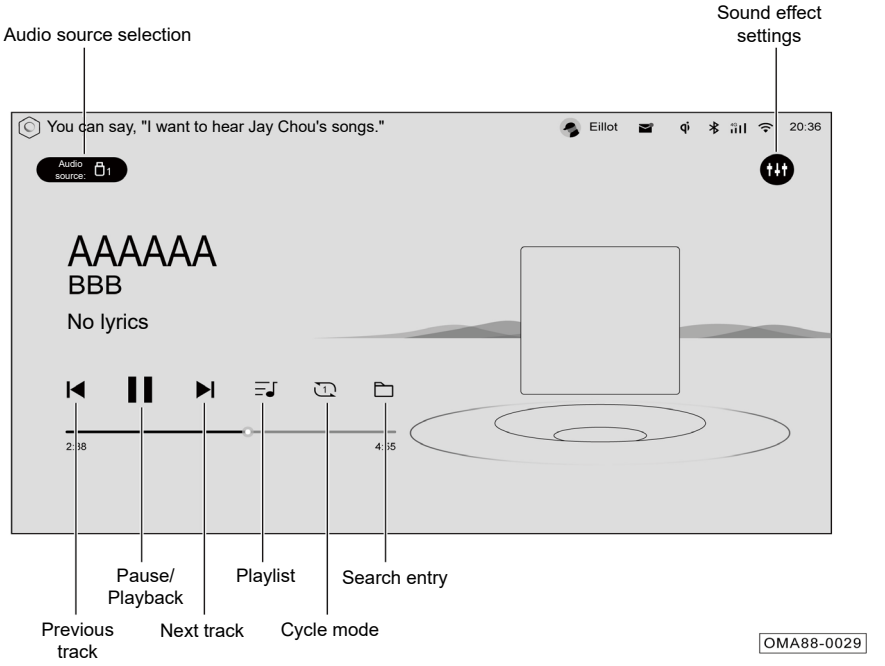
4.6.3 Radio



Enter the Radio interface in the following ways:

- Click the “Radio” card in the main interface to enter the radio mode.
- Press the audio source button on the right side of the steering wheel repeatedly to switch to the radio mode.
- Click “Radio” soft key in the application menu interface to enter the radio playback interface.

4.6.4 Local music



Enter the local music playback interface in the following ways:

- Click the “Media” card in the main interface to enter the local music interface.
- Press the audio source button on the right side of the steering wheel repeatedly to switch to the local music interface.
- Click the “Local Music” soft key in the application menu interface to enter the local music interface.

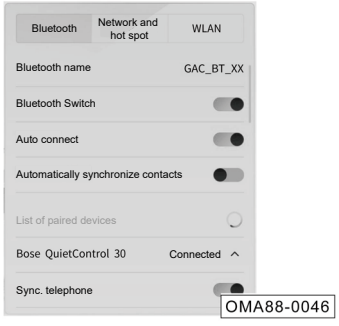
NOTE

The AV system only supports the use of USB devices in FAT16/32, exFAT, and NTFS formats, and supports lossless music.

4.6.5 Bluetooth function

Enter the Bluetooth mode in the following ways:

- Click the “Bluetooth call” soft key in the application menu interface to enter the Bluetooth mode.
- Click the “Bluetooth call” card in the main interface to enter the Bluetooth mode.
- Click the status bar icon ✱ in the upper right corner of the AV system interface to enter the Bluetooth mode.



- If there is no Bluetooth device connected, enter the Bluetooth connection interface in the above way.
- After turning on the Bluetooth function by clicking the “Bluetooth ON/OFF” soft key , the AVNT will automatically search for nearby Bluetooth devices.
- After the Bluetooth connection is made, the status bar icon will be highlighted.
- Click the “Auto Sync Contacts” soft key to synchronize phone numbers, contacts, media and other information.
- Click the “Bluetooth ON/OFF” soft key again to disconnect the Bluetooth.

Bluetooth connection failure

Possible cause	Solution
The device’s Bluetooth function is set incorrectly	Set the device’s Bluetooth so that it can be “Visible to Everyone” or can be searched or opened for detection
The current device is not compatible with the in-vehicle Bluetooth system	Confirm the compatibility of the device with the Bluetooth version, upgrade the mobile phone system to the latest version and try again
The mobile phone’s Bluetooth was connected to other devices	It is recommended to delete the Bluetooth devices that were connected

4.7 E-CALL system *

The functions of E-CALL system include post-crash automatic call and manual emergency call. Post-crash automatic call will be automatically enabled by GAC Motor T-BOX under certain circumstances, while manual emergency call needs to be manually enabled by pressing the SOS button.

Both post-crash automatic call function and manual emergency call function allow for contact with the emergency contact.

- Post-crash automatic call: when the vehicle incurs an accidental collision and the airbag is deployed, GAC Motor T-BOX will activate the post-crash automatic call function to automatically call the set emergency contact.
- Manual emergency call: when the post-crash automatic call function does not work, you can manually press the SOS button to activate the manual emergency call function to call the emergency contact.

SOS button

① SOS button: Press and hold this button for 3 s to allow the GAC Motor T-BOX to activate the manual emergency call function to call the emergency contact set in the system.

i NOTE

- This function is only applicable to some models, and subject to the configuration of the vehicle.
- The emergency contact number is that you designated when you purchase the vehicle.
- If the emergency contact number needs to be changed, please visit the GAC Motor authorized shop for help.
- Please use the SOS button only when necessary.

4.8 Era-Glonass system *

Functions of Era-Glonass system include automatic emergency call and manual emergency call. Automatic emergency call is a function in which the emergency call will be automatically triggered when the specific conditions of the system are met in the event of a collision, and manual emergency call is a function in which the emergency call needs to be triggered manually by pressing the SOS button.

Both automatic emergency call function and manual emergency call function can be used to call for emergency services.

- Automatic emergency call: in the event of a collision or rollover, the Era-Glonass system will activate the emergency call function to call for emergency service.
- Manual emergency call: when the automatic emergency call function does not work, you can manually press the SOS button to activate the manual emergency call function to call for emergency service.

SOS button

In the event of a collision or any other emergency that requires emergency services, please operate as follows:

1. If the indicator lamp of the button ① flashes green or is always on, it indicates that the automatic emergency call function has been activated.
2. When the automatic emergency call function does not work, please press and hold the SOS button ① (about 2s) to activate the manual emergency call function, and to cancel the emergency call in manual mode, please press SOS button ① 5 times immediately before the emergency service is connected.
3. If the emergency service cannot be contacted for any reason, the indicator lamp of the button ① will flash red, and you will hear a voice prompt reading “Emergency call not available”. In this case, please contact the emergency service using your personal mobile phone.

NOTE

- Do not operate other keys of the AV system during an emergency call of Era-Glonass system.
- This function is only applicable to some models, and subject to the configuration of the vehicle.

5.1 Starting and driving

5.1.1 START/STOP button

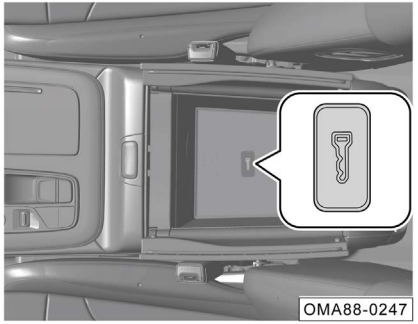
The START/STOP button works only when the intelligent remote control key is detected in the vehicle.

When the transmission gearshift lever is in “P” position and the brake pedal is depressed, the ENGINE START/STOP button backlight will turn green. At this time, press the ENGINE START/STOP button to start the engine.

When the transmission gearshift lever is set to “P” position and the brake pedal is not depressed, press the START/STOP button to switch the positions in the following order: “OFF → ACC → ON → OFF”.

- OFF: The ENGINE START/STOP button backlight turns white, and the ENGINE START/STOP button is switched off.
- ACC: The ENGINE START/STOP button backlight turns orange, and the 12V power supply and other accessories can be used.
- ON: The ENGINE START/STOP button backlight turns orange, the instrument cluster backlight comes on, and all electrical consumers can be used.

Limphome mode



When “No key detected” appears on the instrument cluster display due to low battery of the intelligent remote control key, you can try to place the key horizontally at the mark on the bottom of the front armrest box, then set the START/STOP button to “ACC” or “ON” position and depress the brake pedal, and after the START/STOP button backlight turns green, press the START/STOP button to start the engine.

This method is intended for emergency start. Please replace the battery of the intelligent remote control key as soon as possible.

5.1.2 Engine start

- Enter the vehicle with the intelligent remote control key.
- Make sure the gearshift lever is in “P” or “N” position.
- Depress the brake pedal and ensure that the ENGINE START/STOP button indicator lamp turns green.
- Press the ENGINE START/STOP button to start the engine.

NOTE

In case of a cold start, run the engine at idle speed to warm up it before driving. At the same time, the valve tappet takes a few seconds to reach the normal working pressure and operation noise will occur, which is normal.

CAUTION

- The engine start time shall not exceed 15s. If the engine is not started successfully, you must wait about 30s before next attempt.
- Do not depress the accelerator pedal hard to make the engine run at high speed or overload after starting. Otherwise, the engine is likely to be damaged.
- If the battery level is low and the engine cannot be started, try to start it by using a jumper cable. => See page 304
- It is prohibited to start the engine by pushing or towing the vehicle.

WARNING

- **Do not keep starting the engine for a long time in a poorly ventilated place or an enclosed place. The engine exhaust contains harmful gases which can make people comatose and even suffocate.**
- **Never let the engine idle when unattended.**
- **Do not add a starting aid for starting the engine, as it is likely to make the engine run at high speed or cause an explosion.**

5.1.3 Engine shutdown

- Park the vehicle steady and apply the parking brake.
- Shift the gear to “P”.
- Release the brake pedal, and press the ENGINE START/STOP button to shut down the engine.

i NOTE

After the engine is shut down, the radiator fan may still be running for a while.

Emergency shutdown

When the vehicle is running, press and hold START/STOP button or quickly press the START/STOP button three times in a row, the START/STOP button will switch from the “ON” gear to the “ACC” gear, shut down the engine, and realize emergency shutdown.

After emergency shutdown, wait several seconds before restarting the engine as per the following steps:

- After setting the gearshift lever to “P” or “N” position, press the START/STOP button to start the vehicle.

⚠ WARNING

Emergency shutdown is forbidden during normal driving, as it is likely to lead to vehicle damage, safety and power steering failure, and traffic accidents.

Precautions for parking

When parking, switch the gear to “P” or “N” and pay attention to the following matters:

- Pay attention to the direction when the vehicle is parked, for fear of damage to the green belt due to the exhaust gas spraying on the plants.
- Try to park on a flat and straight road, instead of a steep slope.
- For parking on a slope, regardless of whether the vehicle is facing the top or bottom of the slope, the front wheels should be turned towards the curb.
- Apply the parking brake, shut down the engine, and turn off all lamps and electrical consumers.
- When leaving the vehicle, be sure to take away your valuables and the key, and check that the sunroof, windows, doors and liftgate are closed and locked.

⚠ WARNING

- **When leaving the vehicle, the engine must be turned off, the parking brake must be applied, and the vehicle key must be carried with you**
- **Do not leave any person in the vehicle. Otherwise, suffocation, coma and even death can easily occur in the closed space.**
- **Do not park near flammable and explosive materials.**

5.1.4 Gear description

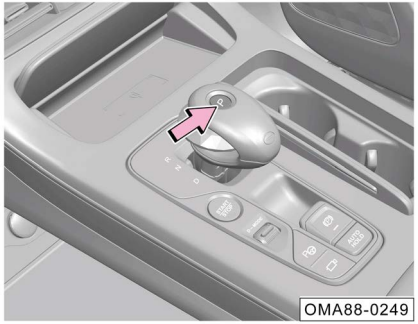
There are “P, R, N, D and S” positions. When the START/STOP button is in the “ON” position, the corresponding gear information should be displayed on the instrument cluster after the gear is engaged.

- Push the gearshift lever forward to shift from “D” position from “R” position. In this process, there are two resistance points. The first resistance point indicates “N” position, and the second resistance point indicates “R” position.
- Push the gearshift lever backward to shift from “R” to “D”. In this process, there are two resistance points. The first resistance point indicates “N” position, and the second resistance point indicates “D” position.

⚠ WARNING

The “R” or “P” gear can be engaged only when the vehicle is completely stationary, otherwise the transmission will be damaged.

P: Parking position



- This position is to be engaged after the vehicle has stopped completely for the purpose of parking.

NOTE

- Please note that the instrument panel will display the current gear position.
- Before the engine is started, the gearshift lever cannot be moved to “D” or “R”.
- When the shift system fails and the “P” gear can not be disengaged, please contact the GAC Motor authorized shop for repair.

R: Reverse position

- This position is to be engaged for reversing.
- When the vehicle is completely stationary and the “P” or “N” or “D” gear is engaged, depress the brake pedal, and push the gearshift lever forward to engage the “R” gear.

N: Neutral position

- This position is to be engaged for temporary parking.
- When the “P” position is engaged, step on the brake pedal and push the gearshift lever forward to the first resistance position to engage the “N” position.
- When the “D” position is engaged, step on the brake pedal and push the gearshift lever forward to the first resistance position to engage the “N” position.
- When the “R” position is engaged, step on the brake pedal and push the gearshift lever backward to the first resistance position to engage the “N” position.

⚠ WARNING

Do not make the vehicle coast with the gearshift lever in “N” position. Otherwise, it is likely to cause an accident.

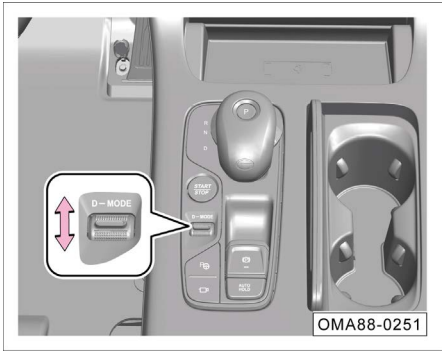
D: Drive position

- Shift into this gear during normal driving.
- Depress the brake pedal, and pull the gearshift lever backward to shift from “P”, “N” or “R” position to “D” position.

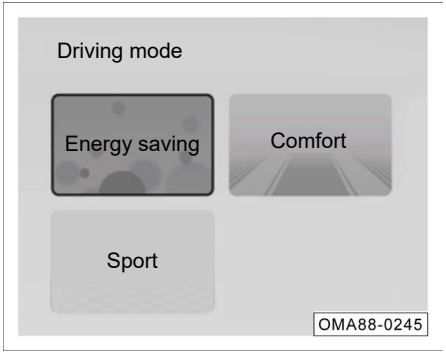
Driving mode

- ECO: In this mode, the slight power hysteresis occurs and fuel consumption is more economical.
- COMFORT: In this mode, the dynamic response and fuel consumption are more balanced.
- SPORT: In this mode, the dynamic response is fast and the fuel consumption is high.

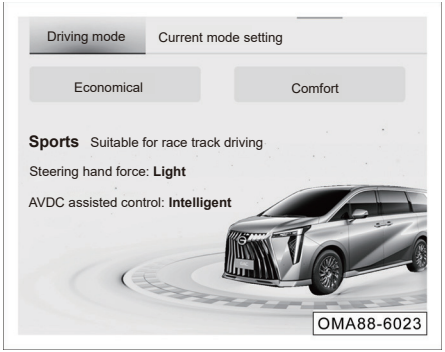
Driving mode selection



1. Set the ENGINE START/STOP button to “ON” position, and turn the D-MODE knob up/down to switch between “Energy Saving Mode→ Sports Mode→ Comfort Mode→ Energy Saving Mode...”.

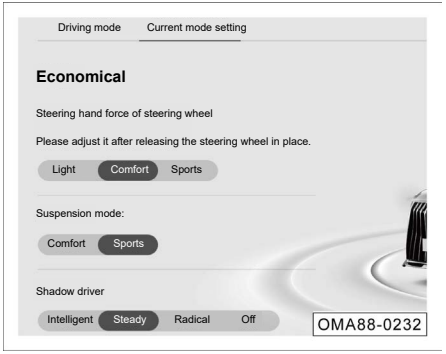


2. Set the vehicle power switch to “ON” position, and switch the driving mode through the driving control panel button on the bottom toolbar of the A/V system.



3. Set the vehicle power switch to “ON” position, and switch the driving mode through the AVDC button in the application menu of the A/V system.

Current mode setting



- Method 1: Set the current mode parameters through the application menu of the A/V system “AVDC→Current Driving Mode Setting”.
- Method 2: If the D-MODE button is turned, the AV system will pop up the “Driving Mode” interface, and in this case, click “Current Mode Setting” to set the current driving mode parameters.

NOTE

- There is a reset button for each driving mode, by which the factory defaults can be restored.
- To memorize the current driving mode, please set the memory function to ON through the AV system display, and the current driving mode will be called by default the next time you start the vehicle.

5.2 Brake system

5.2.1 Service brake

Under certain driving and weather conditions, squeaks, screams, or other noises may be heard from brakes when the brake pedal is depressed for the first time or lightly stepped on, or braking noise during light or moderate braking, especially for new vehicles (as their brakes have not undergone running-in), which is normal, and does not constitute a symptom of brake system failure and has no effect on the braking safety and performance.

CAUTION

- If there is metal friction rasp, the brake lining may be worn to the limit. Please go to the GAC Motor authorized shop for inspection as soon as possible.
- If the steering wheel vibrates or twitches continuously during braking, go to the GAC Motor authorized shop for inspection as soon as possible.

NOTE

- Do not rest your foot on the brake pedal during driving, otherwise the brakes will be overheated, and the brake linings and brake discs will be worn excessively, increasing the braking distance.
- Continuous application of the brake will cause brake overheat and result in a temporary loss of braking performance.
- Under normal driving conditions, brake linings will wear, and dust will accumulate on wheels, which is inevitable but yet has no effect on the braking performance.
- If rust and corrosion exist because the brake linings and brake discs are not used or used rarely, noise may be heard from brakes for the first use. This is normal. It is recommended to choose a safe area and good road conditions and brake the vehicle several times to clean the brake linings and brake discs.

Brake booster

The brake booster is used to increase the pressure applied by the driver on the brake pedal, and it only works when the engine is running.

If the brake booster does not work properly due to a fault, or when the vehicle is towed, the force on the brake pedal must be increased to compensate for the assist power loss of brake booster.

WARNING

- **Never make the vehicle coast with the engine shut down, because at this moment, the brake booster does not work, the braking distance will be greatly increased, and an accident is likely to be caused.**
- **If the brake booster does not work (for example, when the vehicle is being towed), please depress the brake pedal with force much greater than that applied under normal condition.**

Braking effect and braking distance

The braking effect and braking distance mainly depend on the driving environment, road conditions and driving style.

With worn brake linings, the vehicle cannot be braked effectively. The wear rate of brake linings mainly depends on the vehicle operation conditions and driving style. If the vehicle is often driven in urban areas, short-distance driving or used as a racing car, it is recommended to increase the frequency of checking the thickness of the brake lining during the maintenance period specified in the *Warranty Manual*.

After wading, heavy rain or vehicle washing, brake linings may get wet or icy (in winter), resulting in a reduction in braking effects. In this case, the brake pedal must be lightly depressed to heat the brake by friction and evaporate the moisture to restore braking effects.

⚠ WARNING

A new tire and brake lining having not undergone running-in do not have the best adhesion and friction characteristics.

- **The new tires do not yet have the best adhesion, so please drive carefully within the first 500km to avoid accidents!**
- **New brake linings in the first 200km to 300km driving distance do not get the best friction characteristics, and braking effects are not as good as expected, so new brake linings must be subject to running-in. The braking effect can be compensated by increasing the force applied to the brake pedal. New brake linings must also be subject to running-in.**
- **When driving, do not get too close to other vehicles or bring the vehicle to a situation where emergency braking is necessary. Take care especially when driving with a new tire and new brake lining having not undergone running-in, for fear of accidents!**

⚠ WARNING

When the brake is wet or icy or when the vehicle is running on a salted road, the braking lag may occur, resulting in a longer braking distance. Therefore, be careful to prevent accidents.

- **A longer braking distance or a fault in the brake system will increase the accident rate.**
- **Lightly depress the brake pedal to check the brake.**
- **Lightly depress the brake pedal to dry the brake or remove ice or anti-skid salt from the brake.**

⚠ WARNING

When the brake is overheated, the braking effect will reduce, increasing the braking distance!

- **Take care to avoid overheating the brake.**
- **When the vehicle runs downhill, the brake load increases, and the brake is prone to overheating.**
- **Do not keep depressing the brake pedal. Otherwise, the brake will overheat and the braking distance will increase. Brake the vehicle intermittently according to road and traffic conditions.**

⚠ WARNING

- **The brake fluid must be changed every two years. If the brake fluid stays in the brake system for a long period, air resistance may occur in the pipeline during braking, reducing the braking effect significantly and impairing driving safety, and even causing failure of the brake system, resulting in an accident thereby!**
- **If the front spoiler is out of standard or damaged, it will block the cooling airflow to the brake, causing the brake to overheat and degrade the braking effect.**

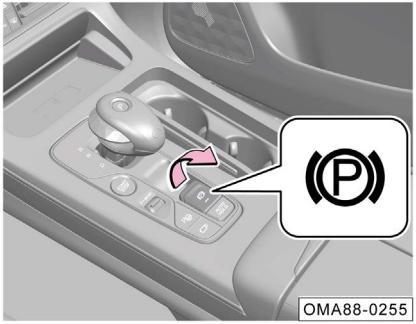
5.2.2 Electronic parking brake (EPB)

The driver can apply or release the parking brake by operating the EPB button. HSA can be applied for driving on a slope. When the accelerator pedal is depressed with the vehicle parked and seat belts fastened, the EPB will be automatically released to provide driving assist for the driver.

i NOTE

- EPB will choose different application force strategies on different slopes. EPB can realize parking on a slope with a maximum gradient of 30%. If parking on a slope with a gradient greater than 30%, there will be a risk of slipping, and the EPB will be applied again, which is normal.
- If the vehicle continues to slide after the EPB is applied again when the vehicle is parked on a slope with a gradient less than 30% and slips, please depress the brake pedal and drive the vehicle to a flat road. Contact the GAC Motor authorized shop for inspection in time.

Application of static parking brake



- When the vehicle is stationary, pull up the EPB button or press the P button as arrowed. The button indicator lamp and the indicator lamp (Ⓟ) on the instrument cluster will come on, indicating that the EPB has been applied.
- When the gearshift lever is moved to the “P” position from other positions, the EPB will be applied automatically.

NOTE

- The EPB can also be applied when the ENGINE START/STOP button is in the “OFF” position.
- After the vehicle is parked steadily, the EPB should be applied first.
- When the EPB is working, operating noise can be heard, which is normal.
- If the vehicle is coupled with a trailer or is to be parked on a steep slope (with a gradient greater than 30%), and the vehicle still slides after the EPB is applied again, please step on the brake pedal, and drive the vehicle to a flat road.
- After the EPB is applied, it can ensure that the vehicle does not slide on a slope with a gradient of 30% within 5min. If sliding occurs during this duration, the EPB will be applied again.
- Be sure to apply the EPB during parking.

CAUTION

Before leaving the vehicle, especially when parking on a slope, move the shift lever to P position, and apply the EPB to ensure that the vehicle does not move.

WARNING

When the vehicle is running, do not apply the EPB for speed reduction unless necessary, as the EPB only applies braking force to rear wheels, which is likely to cause traffic accidents.

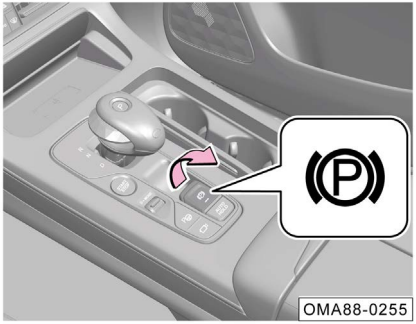
Release of static parking brake

- With IGN ON, depress the brake pedal, and press the EPB button as arrowed. The button indicator lamp and the indicator lamp Ⓟ on the instrument cluster will go out, indicating that the EPB has been released.
- With IGN ON, when the doors are closed, the seat belt is fastened, and the gearshift lever is moved out of P position, the EPB will be released automatically, and the EPB indicator lamp on the instrument cluster will go out, indicating the EPB has been released.
- With IGN ON, when the doors are closed, the seat belt is fastened, the gearshift lever is moved to D or R position, and the accelerator pedal is depressed, the EPB will be released automatically, and the EPB indicator lamp Ⓟ on the instrument cluster will go out, indicating the EPB has been released.

NOTE

- If the EPB button is pressed with the brake pedal not depressed, the EPB will not be released, and the instrument cluster will give an alarm message together with an audible beep alarm.
- When the EPB is being released, operation noise will occur, which is normal.
- When the battery is low, the system cannot release the EPB. If conditions permit, you can connect a jumper cable for emergency start, and then release the EPB. Contact the GAC Motor authorized shop for inspection.
- If the EPB has not been used for a long time, the system will perform automatic test, and operation noise will be heard at this time.
- Press and hold the EPB button, and press the ENGINE START/STOP button at the same time to turn off the power supply of the vehicle, which can realize towing in “OFF” position.

Application of dynamic emergency braking



- If the service brake fails during driving, pull up the EPB button ① constantly, and then release the EPB button or depress the accelerator pedal so that the system exits emergency braking.

NOTE

- If you pull up the EPB button when the vehicle is running, the instrument cluster display will give an visible warning tell-tale together with an audible beep alarm.
- When the vehicle is slowing down, release the EPB button or depress the accelerator pedal to release the EPB. If you EPB pull up the EPB button continuously until the vehicle stops, the EPB will remain engaged.

CAUTION

Do not use dynamic emergency braking unless necessary, as it is likely to cause traffic accidents. Moreover, the braking distance is longer than braking by depressing the brake pedal, and the service life of the parking brake system will be shortened.

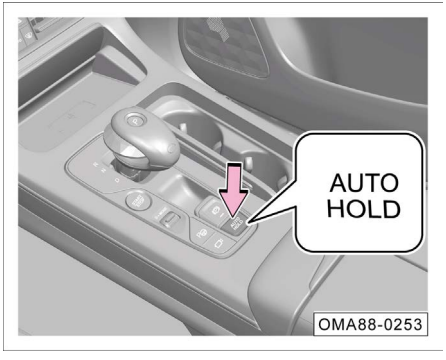
CAUTION

In the following cases, operate the EPB button again. If the fault is not eliminated, please go to the GAC Motor authorized shop for inspection.

- If the indicator lamp (Ⓟ) flashes red continuously, it indicates that the EPB is partially engaged/disengaged or the system is malfunctioning.
- If the indicator lamp (Ⓟ) comes on in red when EPB is not applied, it indicates that the system is abnormal.
- If the indicator lamp (Ⓟ) comes on in yellow, it indicates that a fault is detected in EPB and the EPB is degraded.

AUTO HOLD

On and Off



- When the engine is started, the driver's door is closed and the driver's seat belt is fastened, press the AUTO HOLD button. Then, the button indicator lamp comes on, and the AUTO HOLD is enabled. Press this button again. The button indicator lamp goes out, and the AUTO HOLD is disabled.

Activation

When this function is enabled, it supports automatic brake application and release under stop & go conditions. When the driver brakes the vehicle, the vehicle will be automatically parked to avoid slide at startup.

Exit

Under the following conditions, AUTO HOLD will be disabled and the parking brake will not be locked:

1. The accelerator pedal is depressed at startup.
2. The engine stops while the vehicle is running.
3. The EPB is manually released.
4. The AUTO HOLD button is pressed when the brake pedal is depressed.

For the sake of safety, the AUTO HOLD will be disabled and the parking brake will be locked under the following conditions:

1. The engine is shut down.
2. The driver's door is opened or the seat belt is unfastened when the vehicle is stopped.
3. The AUTO HOLD button is pressed to disable AUTO HOLD.

NOTE

The system has a on/off status memory function. After the engine is started, the driver's door is closed and the driver's seat belt is fastened, the on/off status is the same as that when the vehicle is powered off last time.

CAUTION

When driving into a mechanism such as a vehicle washing device that transports the vehicle with a conveyor belt, be sure to disable the AUTO HOLD, otherwise the vehicle cannot move or may run off the path.

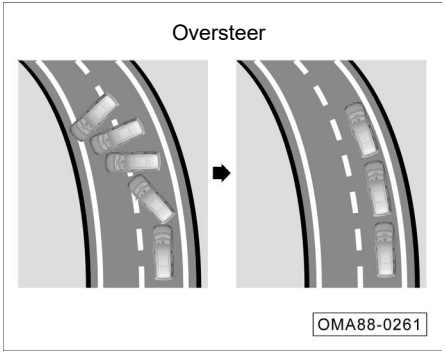
5.3 Electronic service brake system

5.3.1 Electronic stability program (ESP)

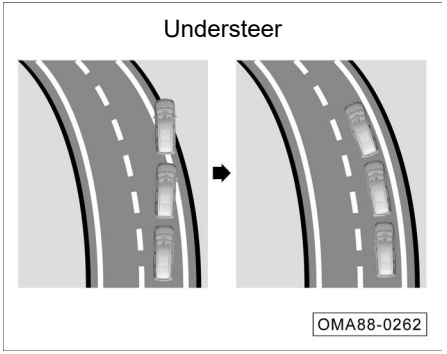
Electronic stability program (ESP) can effectively reduce the risk of sideslip.

ESP determines the driving intention of the driver according to the steering wheel angle and the vehicle speed, and compares it with the actual driving condition of the vehicle continuously. If the vehicle deviates from the normal driving route (such as sideslip), ESP will correct it by applying brake force to the corresponding wheels.

ESP restores the vehicle to a stable driving state via the torsional force generated by braking.

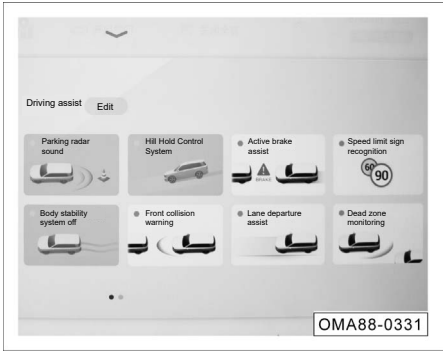


- When the vehicle tends to oversteer (i.e., drift), the system will apply braking force mainly to the front wheel on the outer side of the curve.



- When the vehicle tends to understeer (i.e., excessive turning radius), the system will apply braking force mainly to the rear wheel on the inner side of the curve.
- A vehicle without ESP deviates from the normal driving route due to sideslip. A vehicle with ESP can correct the braking force according to sideslip, to prevent deviation from the route.

On and Off



ESP is on by default when the vehicle is running. Access the AV system interface, click the driving control panel button on the bottom toolbar to enter the driving control panel interface. If the “ESP” soft key is clicked, the ESP will be deactivated (only TCS is deactivated), the indicator lamp on the instrument cluster will come on and an alarm message will be displayed.

Since the electronic stability program (ESP) works only when the vehicle is running, the ESP shall be activated for driving safety. The ESP can be disabled in the following special cases:

- When the vehicle travels with tire chains.
- When the vehicle travels on roads covered with deep snow or on soft grounds.
- When the vehicle is trapped on muddy roads, etc., and you need to move it back and forth.

CAUTION

Improper operation or modifications (such as modifications to the brake system, wheels, tires and other components) of the vehicle will affect the function of ESP.

⚠ WARNING

- **Be sure to adjust the vehicle speed according to weather, road and traffic conditions at any time. Never risk driving merely by virtue of the additional safety functions provided by the systems.**
- **ESP cannot overcome the physical limit of road adhesion; be careful while driving the vehicle on a wet and slippery road or with a trailer coupled.**
- **The driver should adjust the driving style at any time according to the road and traffic conditions.**
- **ESP cannot reduce the risk of accidents caused by improper driving such as driving at a high speed or driving too close to the vehicle ahead.**

Traction control system (TCS)

TCS refers to traction control system. It determines whether the driving wheel slips based on the speed of the driving wheel and the drive wheel, and if the former exceeds the latter, it will limit the speed of the driving wheel. When the vehicle brakes on a smooth road, the wheels will slip, even making the direction out of control. Likewise, when the vehicle starts or accelerates rapidly, the driving wheel may also slip, and the direction may be out of control on a smooth road covered with ice, snow, etc. The TCS is used to automatically control the driving force during vehicle acceleration, so as to keep the slippage of tires within a reasonable range and maintain the driving stability of the vehicle.

5.3.2 Anti-lock braking system (ABS)

Anti-lock brake system (ABS) is an active safety device. When the vehicle is braking, if the front wheels are locked, the vehicle will be unable to make a turn. In this case, steering maneuvers necessary for the driver to avoid obstacles and pedestrians during braking and for driving on curves cannot be achieved. If the rear wheels are locked, the braking stability of the vehicle will be deteriorated, and the vehicle will drift or even turn around under the influence of small lateral force (such as lateral wind force). In addition, when the wheels are locked, local severe friction of tire will significantly shorten the tire life.

For ABS installed on the vehicle, an electronic control unit is added to the original brake system of the vehicle. Its function is to automatically adjust the wheel braking force and prevent the wheels from being locked during braking, so as to obtain the best braking performance and greatly improve the driving safety.

Advantages of ABS

- Giving full play to the effectiveness of brakes and shortening the stopping time and distance.
- Effectively preventing the vehicle from sideslip and drift during emergency braking, and delivering good driving stability.
- Achieving steering during emergency braking, and delivering good steering control.
- Avoiding severe friction between tires and the ground, and reducing the wear of tires.
- ABS is composed of anti-lock electronic control system and ordinary brake system. The anti-lock electronic control system consists of the sensor, the control unit and the actuator.

Self-diagnosis of ABS

- The ABS ECU has self-diagnosis and fail-safe protection functions. When the ENGINE START/STOP button is set to “ON” position, ABS performs self-test. If ABS does not run normally, the ABS indicator lamp (ABS) will stay on. In this case, stop the ABS, restore normal braking, and go to the GAC Motor authorized shop for inspection as soon as possible.

CAUTION

- Improper operation or modifications (such as modifications to the brake system, wheels, tires and other components) of the vehicle will affect the function of ABS.
- Tires must be of a specified size. Incorrect tire size or inconsistent sizes of all tires will affect the normal working of ABS.

⚠ WARNING

Be sure to adjust the vehicle speed according to weather, road and traffic conditions at any time. Never risk driving merely by virtue of the additional safety functions provided by the systems.

Electronic brake force distribution (EBD)

As a part of ABS, the electronic brake force distribution (EBD) balances the distribution of brake force on the front and rear wheels according to the vehicle load during normal braking.

Hydraulic brake assist (HBA)

Hydraulic Brake Assist (HBA) is capable of assisting a driver in braking a vehicle under an emergent condition. It determines whether it is necessary to carry out full braking based on the speed at which the driver depresses the brake pedal. As long as the driver depresses the pedal to the floor all the time, the HBA will automatically increase the braking force to the threshold at which the ABS is activated. If the driver releases the brake pedal, the HBA will reduce the braking force to the specified value.

⚠ WARNING

HBA is only an assist system for improving the driving safety, but it is subject to the limitation of the laws of kinematics. Therefore, please adjust the driving speed according to the road conditions and traffic regulations.

5.3.3 Hill hold control (HHC)

The hill-start hold control (HHC) is an active safety system from software function extension on the basis of ESP, which is mainly used to help the driver to pull away successfully on a steep slope.

When the vehicle is stationary, the HHC detects whether the vehicle is on a slope through the longitudinal acceleration sensor. Subsequently, when the vehicle goes up the slope from the stationary state (through forward traveling or reversing), the HHC will automatically enter the working state. At starting, when the driver releases the service brake pedal, the HHC will maintain the previous brake pressure to ensure that the vehicle still stops, and gradually reduce the brake pressure with the increase of driving torque to prevent the vehicle from sliding backwards in the interval between the driver releasing the brake pedal and depressing the accelerator pedal, thus improving the safety and reliability of the vehicle during starting on a slope.

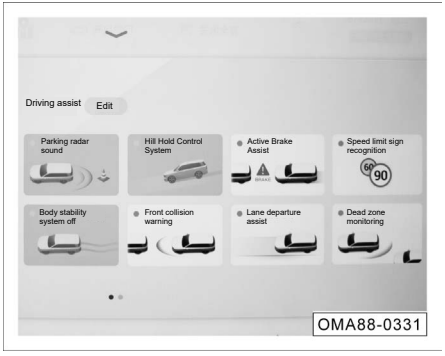
Working conditions

- The accelerator pedal is not depressed.
- The vehicle is stationary.
- The EPB is not applied.
- On the premise of meeting the above basic conditions, if the driver depresses the brake pedal with the vehicle stopped, the HHC is activated.

5.3.4 Hill descent control (HDC)

The Hill Descent Control (HDC) is a subsystem of ESP. If the driver does not depress the brake pedal while going downhill, HDC helps the driver to decelerate while going downhill via the ESP actively applying braking force.

On and Off



- When the vehicle speed is lower than 38km/h, click the click the driving control panel button on the bottom toolbar of AV system to enter the driving control panel interface, and click the soft key of “HDC” to activate the HDC, and the indicator lamp on the instrument cluster stays on.
- Press the button again to deactivate the HDC and the indicator lamp on the instrument cluster goes out.
- When the vehicle speed is higher than 65km/h, HDC is automatically deactivated.

Vehicle speed control by HDC

The HDC works when the vehicle speed is 11~38km/h, which may be adjusted by depressing/releasing the accelerator pedal or brake pedal. The system will adjust the vehicle speed based on the speed when the accelerator and brake pedals are released. When HDC is working, the indicator lamp on the instrument cluster flashing indicates that HDC is working.

HDC malfunction

- Under certain operating conditions such as when the vehicle goes down a long slope, the HDC will be inoperative temporarily due to the high temperature of the brake.
- At this time, the instrument cluster will prompt “The brake system is overheated, please drive gently”, and the driver should pay attention to driving safely. If you need to restore the function, you need to stop and wait for the brake to cool down.

5.3.5 Hydraulic boost failure compensation (HBC)

When the vacuum booster fails, the HBC can compensate for the temporary low vacuum pressure caused by the vacuum failure and increase the brake pressure. Meanwhile the instrument cluster will display the alarm message. In this case, please contact the GAC Motor authorized shop for inspection as soon as possible.

5.4 Driver assistance systems

5.4.1 Adaptive cruise control (ACC)

The adaptive cruise control system is abbreviated as ACC. It can automatically adjust the following distance to the vehicle in front in cruise control mode.

ACC detects the relative distance and speed with the vehicle ahead on the same path according to the signals from the radar installed on the front of the vehicle and the IFC installed on the windshield.

- If a vehicle ahead is stopped, ACC controls the vehicle to stop automatically; if the vehicle ahead is started, ACC controls the vehicle to start again automatically within a short time. After stop for a period of time, the vehicle can be started by setting the multi-function “OK” button upward or depressing the accelerator pedal as the vehicle ahead is started.
- When the speed of vehicle ahead is lower than the target speed set by the driver, ACC controls your vehicle at a safe distance from the vehicle ahead.
- When there is no vehicle ahead, ACC controls the vehicle to run at a fixed speed at the target speed set by the driver.

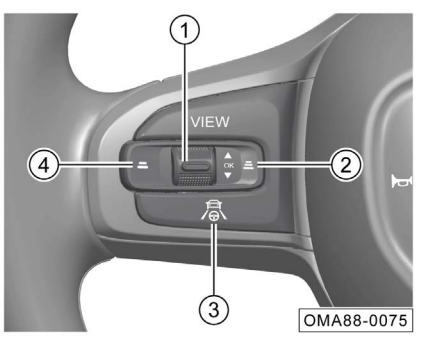
NOTE

Precautions for use of radars and IFC sensors. => See page 218

WARNING

- **ACC is not a safety system, obstacle detector, collision warning or anti-collision system, but a comfort system. The driver must always have control of the vehicle and take full responsibility for the vehicle.**
- **The ACC system must be used carefully according to the visibility, weather conditions, road and traffic conditions at the time. The driver must always keep control of the vehicle and take full responsibility for the speed of the vehicle and the distance from other vehicles.**
- **The ACC system cannot replace the driver's attention and decision-making. The driver is always responsible for ensuring that the vehicle runs safely at an appropriate speed and maintains an appropriate distance from other vehicles.**

Control buttons



① : Multi-function "OK" button

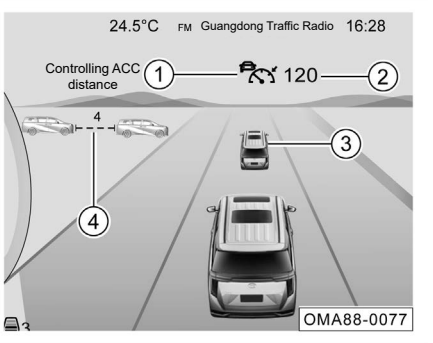
- Resetting ACC/acceleration (by moving up)
- Confirmation/setting (by pressing)
- Deceleration (by moving down)

② : Headway increasing button

③ : Activating/deactivating ACC (by pressing)/switching the cruise mode (by pressing and holding)

④ : Headway decreasing button

Interface description



When ACC is activated, the instrument interface automatically jumps to the intelligent driving theme. In the intelligent driving theme interface, buttons on the left side of the steering wheel respond as follows:

① ACC indicator lamp:

- If the gray ACC indicator lamp comes on, it indicates that ACC is in the suppression or ready state, and there is a target vehicle ahead; if the blue ACC indicator lamp comes on, it indicates that ACC is working, and there is a target vehicle ahead.
- If the gray ACC indicator lamp comes on, it indicates that ACC is in the suppression or ready state, and there is

no target vehicle ahead; if the blue ACC indicator lamp comes on, it indicates that ACC is working, and there is no target vehicle ahead.

- If the yellow ACC indicator lamp comes on, it indicates that ACC is faulty. In that case, go to the GAC Motor authorized shop for inspection and repair in time.

② It indicates the set cruising speed.

③ It indicates the detected vehicle ahead;

④ It indicates the set headway from the vehicle ahead.

When the braking capacity of ACC is not enough to maintain a proper distance from the vehicle ahead, ACC will send a message reading “Please take over the steering wheel immediately”, and the instrument cluster will give a visible alarm and an audible alarm. In this case, the driver shall depress the brake pedal to reduce the vehicle speed according to the system requirements.

Activating ACC

- If the button is pressed, the corresponding blue indicator lamp on the instrument cluster will come on, and the vehicle will enter the ACC status.

NOTE

- The lowest possible cruise control target speed is 15km/h.
- When the gearshift lever is not in D position, ACC cannot be activated.

Deactivating ACC

ACC can be deactivated by:

- Opening the driver’s door.
- Unfastening the driver’s seat belt.
- Depressing the brake pedal.
- Setting the gearshift lever to a position other than D.
- Pressing the button (after that, the corresponding indicator lamp on the instrument cluster will turn gray, ACC will be deactivated, but the set speed will be kept).
- Pressing the EPB button.
- Deactivating the ESP.
- When the HDC system is turned on.

If deactivated by the following ways, ACC may be resumed by moving up the multi-function “OK” button:

- Depressing the brake pedal.
- Pressing the button .
- Setting the gearshift lever to a position other than D (gearshift lever should be set to D position).
- Pressing the EPB button (it is required to release EPB).
- Deactivating the ESP (it is required to switch on the ESP for resuming the ACC).

Resuming ACC

When the corresponding gray indicator lamp on the instrument cluster comes on, ACC can be reset by the following ways:

- Moving up the multi-function “OK” button, after which the corresponding blue indicator lamp on the instrument cluster will come on, the vehicle speed will return to the value set during the last cruise, and the cruise control will be resumed.
- If no cruising speed has been set, ACC will set the current vehicle speed as the cruising speed (if the current vehicle speed is lower than 15km/h, the cruising speed will be set to 15km/h).

Increasing cruising speed

To increase the vehicle speed, please do the following:

- Depress the accelerator pedal to increase the vehicle speed to a target value and move up the multi-function “OK” button (keep the accelerator pedal depressed) for cruising at the increased speed.
- Move up the multi-function “OK” button for a short time to increase the vehicle speed by 5km/h each time.
- Move up the multi-function “OK” button for a long time to increase the cruising speed at an increment of 5km/h until the button is released.

NOTE

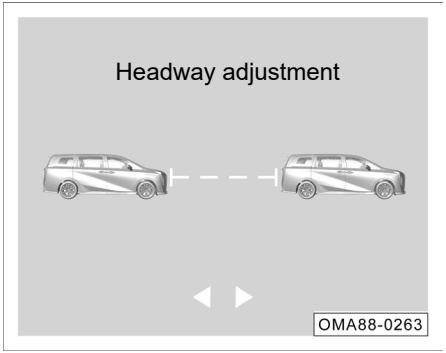
- The maximum setable cruising speed is 130km/h.
- When the accelerator pedal is depressed for acceleration, the vehicle will temporarily deactivate the cruise control and accelerate according to the driver’s intention; after the accelerator pedal is released, the vehicle will resume the ACC and the set cruising speed.

Reducing cruising speed

To reduce the vehicle speed, do the following:

- Move up the multi-function “OK” button for a short time to decrease the vehicle speed by 5km/h each time.
- Move up the multi-function “OK” button for a long time to decrease the cruising speed at an increment of 5km/h until the button is released.
- During the cruising process, press the button of steering wheel (with ACC deactivated), make the vehicle coast or slightly depress the brake pedal until the target speed is reached, and press the button to cruise at the target speed.

Controlling ACC distance



With the START/STOP button in “ON” position, when ACC is activated, the distance from the vehicle ahead is in the fourth range (the following distance in the fourth range is the farthest).

By pressing the button or , the distance setting can be changed in the order of “first range → second range → third range → fourth range” and “fourth range → third range → second range → first range”. At the same time, the instrument cluster will display the same number of cross bars as the ordinal number of the range.

Activating ACC after following stop

In the process of following a vehicle in front, the vehicle will also be stopped if that vehicle is stopped. During a certain period after such stop, ACC will keep your vehicle stationary by active pressurization of ESP; after this period, ACC will keep your vehicle stationary by activating EPB. When the vehicle ahead is driving away, the ACC may be activated as follows:

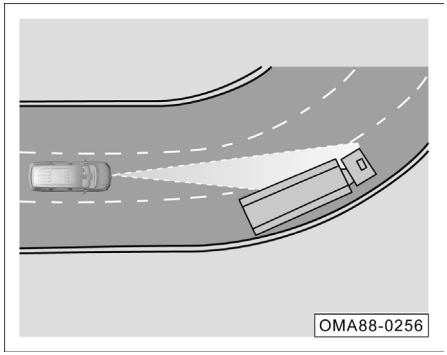
1. If the blue ACC indicator lamp comes on, ACC can be reset actively and re-drive the vehicle after the vehicle ahead is driven off.
2. If the gray ACC indicator lamp comes on and EPB is not activated, the instrument cluster will display the message “Waiting for ACC”; if there is a vehicle ahead, ACC can be reactivated by moving up the multi-function “OK” button or depressing the accelerator pedal; if there is no vehicle ahead, for the sake of safety, ACC can be reactivated by depressing the accelerator pedal.
3. If the gray ACC indicator lamp comes on and EPB is activated, ACC may be reset and re-drive the vehicle by releasing EPB first and then moving up the multi-function “OK” button.

System limitations

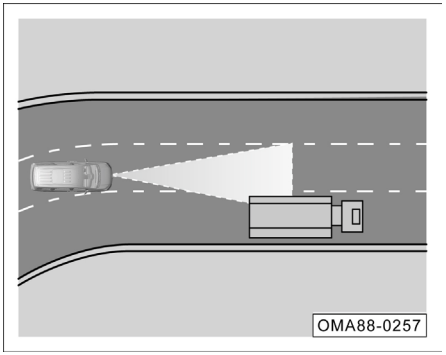
ACC is subject to limitation of physical laws, and thus in some driving environments, the driver may feel a response lag of ACC or may fail to control the vehicle as expected; therefore, the driver must always be ready to take over the vehicle.

The following conditions will affect the sensor function of the MMW radar system, and the driver must be especially alert when encountering these conditions:

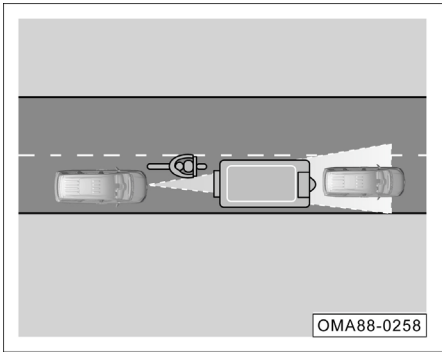
1. Decelerating to stop. If the vehicle ahead stops with emergency braking, the ACC also decreases the vehicle speed or gives a prompt of takeover request. The driver shall actively intervene in braking according to the takeover request alarm to stop the vehicle completely.



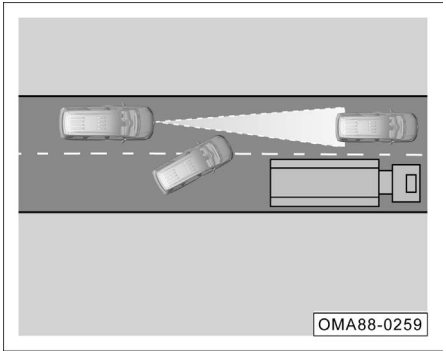
2. Driving through a curve. During driving through a curve, the MMW radar sensor or IFC sensor may fail to capture the vehicle ahead in this lane, or may react to vehicles in adjacent lanes. In this case, ACC may not respond to the vehicle ahead, or may brake the vehicle to reduce the vehicle speed. ACC can be exited by depressing the brake pedal or manually deactivating ACC.



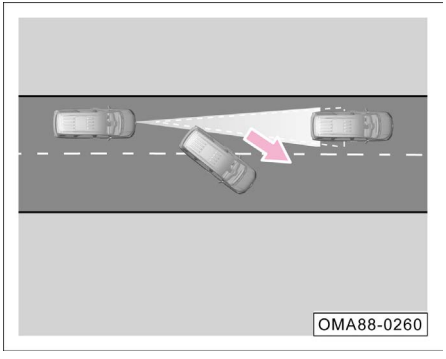
3. Drive out of the curve. During driving out of a long curve, as ACC will calculate the lane in advance, the MMW radar may respond to the vehicles in adjacent lanes and apply the brake of ego vehicle. This braking process can be interrupted by depressing the accelerator pedal.



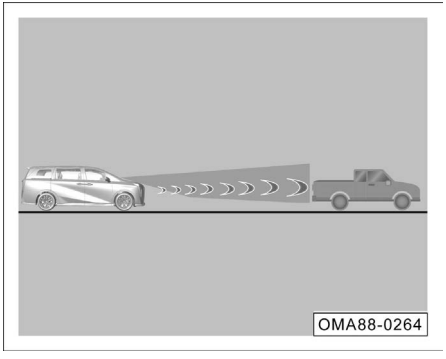
4. Narrow vehicles and Z-shaped traffic in front. The narrow vehicles and Z-shaped traffic in front can be detected by the MMW radar sensor only when they enter the detection range of the radar sensor. That is to say, the system cannot identify vehicles out of the detection range of the sensor. The ACC system is not easy to identify narrow vehicles such as motorcycles. At the same time, there is a risk that the ACC system may not be able to accurately identify the distance from the vehicle ahead which are modified or with irregular transportation. It is not recommended that such vehicles are taken as the front target vehicle.



5. When another vehicle changes the lane. When a vehicle in the adjacent lane moves into the lane in which your vehicle travels, the front MMW radar may fail to detect it if it is not in its detection range, thus resulting in a response lag of ACC.



6. If the target vehicle in front is driven out suddenly and a stationary vehicle appears at close range, the radar sensor and brake actuator will incur a response lag, causing delayed braking response.



7. ACC should not be used in cities with traffic jams and poor visibility (night/ backlighting/ rain/ snow/ dense fog, etc.). ACC may not take braking measures in face of people, animals, narrow vehicles such as bicycles, motorcycles or electromobiles, drop frame trailers, approaching or stationary vehicles, and low-speed or stationary trucks/ small pickup trucks, so the driver should be particularly alert and always be ready to take over the vehicle.

8. Factors that may deteriorate sensor function:

- Heavy rain, water mist, ice, snow or sludge may deteriorate the function of the MMW radar sensor. As a result, ACC is deactivated temporarily. Meanwhile the instrument cluster displays the following text messages: “The forward radar is blocked” and “Cruising conditions are not met”. At this time, the ACC and FCM cannot function.
- Frosting or fogging of front windshield due to temperature difference or frost in low-temperature and alpine areas, which will obstruct the IFC sensor, and cause display of following telltales on the instrument cluster: “The view of IFC is obstructed” and “Cruising conditions are not met”. At this time, the ACC and FCM cannot function.
- Under high temperature conditions, the ACC system cannot be used, and can be reactivated after the temperature drops.

9. Brake overheating. If the brake is overheated due to emergency braking or driving down a steep slope, ACC will be deactivated automatically, and meanwhile the instrument cluster will display a tell-tale reading “Cruising conditions are not met”. After that, ACC can no longer be activated. until the brake temperature drops to a reasonable degree.

i NOTE

- Do not bump into the MMW radar sensor. If the sensor is misaligned due to bumping, the system performance will still deteriorate even after repair and correction and even the system will be shut down.
- If the surface of the MMW radar sensor or IFC sensor is dirty or covered by heavy rain, ice, snow, sludge, etc., ACC may not function, and the instrument cluster will display the message “The forward radar is blocked” and “The view of IFC is obstructed”. After the dirt on the sensor surface is cleaned, the function will be reset and return to normal.
- Do not paint the front bumper or front main logo or paste decorations such as stickers on the front bumper or front main logo, otherwise the performance of the MMW radar sensor may be reduced.
- ACC will not respond to people, animals and vehicles crossing laterally or driving towards the vehicle in the same lane.

NOTE

- When passing through intersections, speed bumps, steep roads, zebra crossings, or driving on reversible lanes, highway entrances and exits, ramps or construction sections, it is necessary to exit the ACC system and adopt full manual driving, so as to avoid traffic accidents caused by the automatic acceleration of the vehicle to the set speed under these circumstances.
- ACC can automatically drive the vehicle out after a short stop or confirmation from the driver (control of buttons or accelerator pedal). During this period, the driver must ensure that there are no obstacles or other traffic participants such as pedestrians or bicycles in front of the vehicle.
- If ACC fails to function properly, stop using it, and go to the GAC Motor authorized shop for inspection in time.

NOTE

- ACC may not respond under certain circumstances. For example, the system may not respond when a vehicle approaches a stationary obstacle such as a broken down vehicle or a vehicle waiting in a traffic jam, or when a vehicle traveling in the same lane approaches the vehicle.
- ACC can only provide limited braking force, and thus cannot be used for emergency braking.
- Prevent placing your foot on the accelerator pedal when not required; otherwise, ACC cannot function for braking, as the depressing of accelerator pedal will cause excessive control of vehicle speed and distance.
- When the vehicle is traveling in heavy rain or snow such that ACC is difficult or unable to identify the vehicle ahead, it is required to switch off the ACC.
- ACC may respond in advance under certain circumstances. If the vehicle in the adjacent lane is to travel to the lane of the ego vehicle, the ego vehicle will predict in advance and slow down, so the driver should pay attention to the road conditions at all times.

NOTE

- When ACC is enabled, the ACC status displayed on instrument cluster display may be overwritten by other functions (for example, during telephone calls).
- When ACC brakes the vehicle automatically after activation, there will be a sound different from manual braking sounds or the brake pedal will be depressed automatically, which is normal. This sound and pedal action is caused by the operation of the brake system. There is no need to worry.
- The stored cruising speed will be deleted after the vehicle is powered off.
- You can step on the accelerator pedal at any time to increase the speed. After the accelerator pedal is released, ACC will readjust the vehicle speed to the previously set cruising speed.
- If the vehicle enters a tunnel, the MMW radar sensor and IFC may enter the blind mode, and ACC may be turned off temporarily.

⚠ WARNING

- **The ACC function cannot cover all driving scenarios and traffic, weather and road conditions.**
- **The ACC is only a driver assist system, and cannot replace your attention and judgment. It is your responsibility to maintain a safe distance and speed, and you must be ready to intervene if the ACC fails to maintain a proper speed or distance from the vehicle ahead.**
- **For the sake of safety, do not use ACC under conditions such as urban driving, traffic jams, multi-curve roads and poor road conditions (e.g. icing, fog, gravel, heavy rain, and phenomena prone to water skiing).**

⚠ WARNING

- **Do not activate ACC during driving in roadless areas or on earth roads. ACC can only be activated on flat roads paved with pitch, cement, etc.**
- **The hands-on reminder of ACC only warns the driver of vehicles detected by its MMW radar sensor and IFC sensor, so ACC may not send an alarm, or may send an alarm after a certain delay. Never wait for an alarm to be given and step on the brake when the situation requires.**
- **ACC is not a collision avoidance system. If your vehicle is getting closer and closer to the lead vehicle at a speed higher than that of the lead vehicle and the braking effect of ACC is unable to stop the vehicle safely before a collision with the lead vehicle, the driver must depress the brake pedal to reduce the vehicle speed.**

⚠ WARNING

The ACC has no or limited response to:

- **Large speed difference with the vehicle ahead.**
- **Driving on different roads, lane changes or driving on curves with small radius.**
- **Pedestrians, animals, bicycles, tricycles, stationary vehicles or unexpected obstacles.**
- **Complex traffic conditions.**
- **Oncoming traffic or cross traffic.**
- **Low trailers or trucks, and vehicles with irregular or non-standard characteristics.**

Therefore, be sure to notice traffic conditions and respond accordingly. Do not wait for the system to identify the target or apply the brake, but apply the brake as needed.

5.4.2 Integrated cruise assist (ICA) system

Integrated cruise assist is abbreviated as ICA. ICA can automatically adjust the distance from the vehicle ahead during cruise control and keep the vehicle traveling in the middle of the lane (hereinafter referred to as “steering assist”) at the cruising speed of 0~130 km/h.

ICA detects the relative distance and speed with the vehicle ahead in the same path according to the signals from the MMW radar sensor installed on the front of the vehicle and the IFC installed on the front windshield, and detects the lane marking through the IFC.

ICA can improve driving comfort and provide a more relaxed driving experience, such as long-distance driving in smooth traffic on the highway.

i NOTE

Precautions for use of radars and IFC sensors. => See page 218

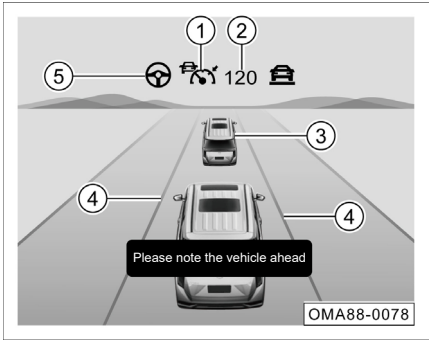
Operation Instructions

- Select “ICA” on the Settings interface of AV system to turn on the ICA function, and select “ACC” to turn off the ICA function.
- After being selected, ICA can be activated according to the operation mode of ACC. => See page 177

i NOTE

- The cruise mode can be changed regardless of the status of ACC, including OFF/ON/Active.
- When ICA has a specific fault that does not affect ACC, the cruise mode will automatically jump back to the ACC. At this time, the driver cannot choose to enter the ICA mode, but ACC can still work normally.
- The ICA has a cruise mode memory function, so that the cruise mode the same as that before last shutdown will be selected after the engine is restarted.

Instrument cluster display interface



① ACC indicator lamp:

- If the ACC indicator lamp comes on in gray, it indicates that ACC is in the suppressed or ready state, and there is a target vehicle ahead; if the ACC indicator lamp comes on in blue, it indicates that ACC is working, and there is a target vehicle ahead.
- If the ACC indicator lamp comes on in gray, it indicates that ACC is in the ready state, and there is no target vehicle ahead; if the ACC indicator lamp comes on in blue, it indicates that ACC is working, and there is no target vehicle ahead.

- If the yellow ACC indicator lamp comes on, it indicates that ACC is faulty. In that case, go to the GAC Motor authorized shop for inspection and repair in time.

② It indicates the set cruising speed.

③ It indicates the detected vehicle ahead.

④ Indicates a lane marking.

- It will not be displayed if the system fails to detect a valid lane marking, turn gray if the system detects a valid lane marking, and turn blue if ICA is activated or LKA is working. It will turn red if LKA gives an alarm.

⑤ Indicates the ICA indicator lamp.

- If the gray ICA indicator lamp on the instrument cluster comes on, it indicates that ICA has been activated and is on standby. In this case, as long as the ACC activation process is followed, the vehicle will activate the ICA and turn on the blue ICA indicator lamp .

The function of ICA is dependent on the lane markings set on a road. When ICA is activated, the ICA indicator lamp may still be gray; if the system detects a valid lane marking, the steering assist will be activated automatically, and the steering assist indicator lamp will turn blue.

Please perform the following operations before activating ICA; otherwise, ICA cannot be activated, and a message reading “The operating conditions of cruise control are not met” will pop up on the instrument cluster. For more precautions for operation, please refer to section “ACC”. => See page 177

- Close the doors properly.
- Fasten the seat belt.
- Set the gearshift lever to D position.
- Release the brake pedal.

Interrupting steering assist

The steering control of the vehicle by ICA can be temporarily interrupted by the following ways:

- Continuously turning the steering wheel.
- Turn on the turn signal lamp.
- Turn on the hazard warning lamp.
- Manually making a lane change.

When the above operation is performed, the steering assist indicator lamp on the instrument cluster turns gray from blue , indicating that the steering assist is deactivated temporarily. After the above operation is stopped, the ICA will be resumed automatically when the relevant conditions are met.

Steering assist

In ICA mode, the steering assist will be automatically activated when a valid two-sided lane marking is detected and the ACC is turned on.

ICA will keep the vehicle traveling in the middle between the lane markings on both sides.

ICA will be suppressed and give a steering assist prompt under the following conditions:

- No lane markings on the road or unclear lane markings.
- High curvature of lane marking (before a sharp curve).
- Hands-on reminder given by the system when both hands are off the steering wheel for a long time;
- The lane is too wide or too narrow.
- The vehicle speed is higher than 130km/h.

After being suppressed, the ICA function will be automatically activated again as long as the activation conditions are met again.

NOTE

The driver can still turn the steering wheel to control the vehicle when the steering assist is applied. When the driver feels that the torque applied by the system is improper, he/she can control and drive the vehicle as his/her attention at any time.

Hand-held detection and prompt

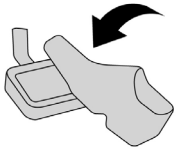
When detecting that the steering wheel is out of the driver's hands for a long time, ICA will issue a hands-on reminder. In this case, a hands-on symbol will flash above the ICA indicator lamp, and a text prompt will pop up. If the driver still does not take over the steering wheel, the prompt will be escalated to the visual symbol described above plus an audible alarm. For some models, a seat vibration alert will also be triggered.

The driver shall immediately hold the steering wheel immediately after receiving the hands-on reminder. Do not panic and avoid turning the steering wheel sharply unnecessarily. After ICA recognizes that the driver is holding the steering wheel by detecting the torque manually applied to the steering wheel, the takeover reminder disappears. In this case, ICA is automatically reactivated.

If the driver does not take over the steering wheel within a period of time after a steering wheel hands-on reminder is issued, the steering assist function of ICA will be interrupted.

NOTE

The condition that the driver's hands are lightly holding on the steering wheel may be misinterpreted by the ICA as the steering wheel out-of-hand. In this case, the driver only needs to hold the steering wheel mildly or shake the steering wheel slightly, so that the system can detect the torque applied to the steering wheel. Afterwards the hands-on reminder will disappear.



Please take over now

OMA88-0065

Limited braking capacity of the service brake system can be used by ICA. When ICA requires the driver to intervene in braking, the instrument cluster will give a visible alarm, accompanied by an audible alarm.

The driver shall immediately hold the steering wheel immediately after receiving the hands-on reminder.

After the brake pedal is depressed, ICA will be deactivated. If ICA reactivation is required after an emergency is eliminated, press the button or move up the multi-function “OK” button to reactivate or resume ICA.

Others

The operation methods of resuming ICA, adjusting the cruising speed, adjusting the car-following time gap, and start after following stop, are the same as those of ACC. For details, refer to section ACC. => See page 180.

Functional limitation

The steering system and brake system capabilities that can be applied by ICA is limited, so ICA cannot maintain a proper vehicle safety distance in all road conditions, nor can it keep the vehicle in the lane in all road conditions.

ICA may incorrectly detect lane markings or fail to detect lane markings, or may incorrectly detect target vehicles or fail to detect target vehicles ahead.

Even if enabled and being working, ICA may be affected, malfunction or not function under the following conditions:

- Poor sight due to rain, snow, smog or sandstorm and other weather conditions;
- Dirty or foggy front windshield, or obstructed IFC.
- Poor sight caused by direct sunlight, light irradiation of oncoming vehicles, and reflection of accumulated water on the road surface;
- Severe changes in illumination conditions, such as in and out of tunnels;
- Poor lighting conditions at night;
- Non-standard lane marking;
- Special lane marking colors, such as construction areas;
- The lane marking is not obvious, such as too thin, worn, blurred or covered by dirt, brake marks, snow, water accumulation, etc;
- There is no lane marking, or the color of the lane marking is similar to that of the road surface and the road edge;
- Isolation strips or other objects casting shadows on lane markings.
- Close distance from the vehicle ahead or partial or all lane markings blocked by the vehicle ahead;
- Lane marking blocked by construction facilities and so on;
- There are signs or objects similar to lane markings on the road, such as brake marks, other signs printed on the road, road edges, lane joints, etc;
- Increase or decrease in the number of lanes;

- Complicated routing of lane markings;
- There are more than two lane markings on the left and right sides of the vehicle.
- The lane is too wide or too narrow.
- Short-term change of marking, such as ramp entrance and exit;
- High curvature or dramatic change (such as at an S-bend) of lane marking;
- Driving on steep slopes or inclined or curved roads;
- Bumpy, icy or waterlogged roads;
- Severe shaking of the vehicle.

The speed assist of ICA is the same as that of ACC. For more limited working conditions, please refer to the chapters of ACC => See page 180.

The steering assist control performance of the system may be affected under the following conditions:

- The vehicle is overloaded.
- The tire pressure is abnormal.
- The road surface is uneven.
- The crosswind is strong.
- The driver modifies the parts related to vehicle control.
- Replace the vehicle control-related parts with non-original matching parts.
- Improper assembly of vehicle handling related parts.

⚠ WARNING

- **The driver should determine whether the traffic environment, etc. are suitable for ICA. Do not use ICA in urban traffic, intersections, watery and snowy roads, bad weather, mountainous roads, undulating roads, highway entrances and exits, etc. Do not use the ICA when the vehicle is connected to the trailer.**
- **Improper use of ICA or negligence may lead to accidents. The driver always takes full responsibility for driving, even when ICA is working.**
- **The driver shall always be responsible for compliance with traffic safety codes and safe and civilized driving, even when ICA is working.**

⚠ WARNING

- **ICA only provides a driving assistance function and cannot address all road, traffic and weather conditions. The driver always takes full responsibility for driving, and shall always check the road conditions and actively control the vehicle.**
- **Before using ICA, the driver must read through all sections about this function in the User Manual to understand the system limitations.**
- **The ICA is not a collision avoidance system. When ICA does not take proper control, the driver must intervene.**
- **ICA cannot cope with all driving conditions or replace the driver. he driver must hold the steering wheel all the time to actively control the vehicle. When ICA does not provide proper assist or provides improper assist, the driver shall intervene timely.**

⚠ WARNING

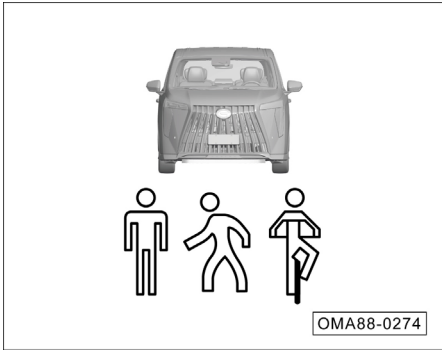
The ICA has limitations, such:

- **ICA may wrongly identify or even don't identify a lane marking due to bad weather, damaged lane markings, etc., and thus it may not generate steering assist or may generate unnecessary steering assist by mistake when needed.**
- **The capability of steering system that can be used by ICA is limited, so it cannot cope with all driving conditions.**
- **ICA cannot address all traffic conditions. For example, the steering assist may be suddenly exited under road conditions such as high curvature of lane marking before a sharp curve, and roads without lane markings.**

5.4.3 Forward collision mitigation (FCM) system

The FCM assesses the danger level of pre-collision by detecting the relative distance and speed with the vehicle ahead in the same path according to the signal from the MMW radar installed on the front of the vehicle and the IFC installed on the front windshield and the driver's other operations (such as depressing the brake pedal or accelerator pedal), gives an alarm to remind the driver to take measures in time in case of a collision risk, and applies the brake automatically when an impending collision is detected. When the driver is braking while the braking force is insufficient to avoid a collision, the system will automatically increase the braking force to avoid or alleviate the collision.

Detectable objects:



- Vehicle
- Two-wheeler
- Pedestrians

i NOTE

Refer to precautions for use of radars and IFC sensors. => See page 218

Forward collision warning

FCW issues an alarm for impending collision to alert the driver by detecting objects ahead according to the signal from the MMW radar installed on the front bumper and the IFC installed on the front windshield.

The FCM alerts the driver by the following three methods:

1. Distance warning

When the distance warning of the FCM is triggered, the FCWS indicator lamp on the instrument cluster will flash, accompanied by the visual prompt.

2. Proximity warning

When the early of the FCM is triggered, the FCWS indicator lamp on the instrument cluster will flash, accompanied by the audible alarm and visual prompt.

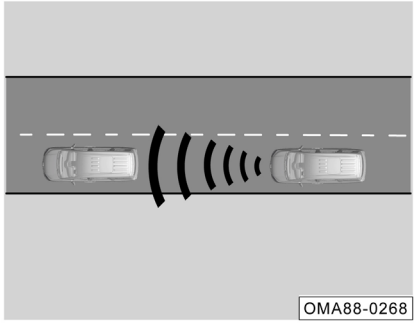
3. Brake jerk warning

When the vehicle has a high risk of colliding with the moving target vehicle, brake jerk is triggered to remind the driver that the brake shall be applied immediately.

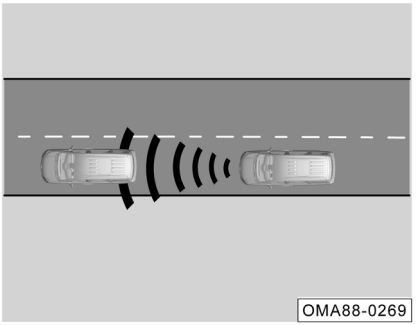
AEB

When a collision is about to occur, the system will issue an alarm to alert the driver that the vehicle is ready to apply emergency braking according to the signal from the MMW radar installed on the front bumper and the IFC installed on the front windshield, and then will assist in braking and activate the active brake assist function.

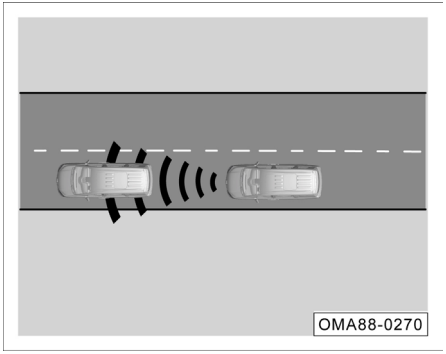
Active braking level



- First-level braking: Brake jerk warning is provided when your vehicle is approaching a vehicle ahead.

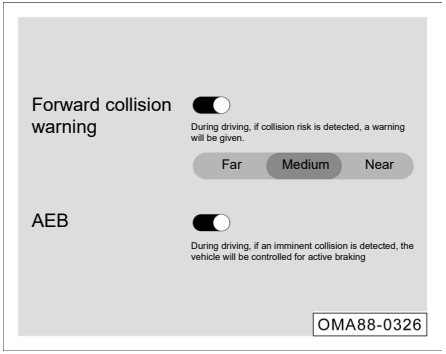


- Second-level braking: Slight automatic emergency braking is performed while this car continue to approach to the frontal vehicle.



- Third-level braking: full automatic braking is performed because a rear-end collision is inevitable.

On and Off


Forward collision warning
During driving, if collision risk is detected, a warning will be given.
Far
Medium
Near
AEB
During driving, if an imminent collision is detected, the vehicle will be controlled for active braking
OMA88-0326

- When the START/STOP button is in “ON” position, the FCW and AEB are automatically turned on.
- “FCW” and “AEB” can be set to ON/OFF via the AV system display.
- When FCW or AEB is being deactivated, a reconfirmation box will pop up on the multi-function touch screen. In this case, click “OK” or “Cancel” to confirm the operation.

i NOTE

- The FAW warning distance can also be set through the AV system display among “Far, Medium and Near”. Memory of FCW warning distance is available to memorize the warning distance set last time.
- After being turned off, FCW and AEB will no longer give an alarm or apply the brake in case of any target vehicle and pedestrian.
- After FCW or AEB is deactivated, they will be activated automatically by default if the START/STOP button is set from “OFF” position to “ON” position again.

System limitations

There are physical limitations and system limitations in the FCM, for example, FCW and AEB may be inadvertently triggered or delayed by driver's interference in some cases. So please stay alert and take the initiative to take control if necessary.

The following conditions may cause delayed operation or non-operation of the FCM:

- When the ground clearance of the vehicle ahead is very high, such as semi-trailer, etc.
- The rear of the vehicle ahead is low, such as a low-bed trailer.
- The shape of the vehicle ahead is irregular, such as a tractor or a straddle truck.
- The brightness of the surrounding environment changes suddenly, such as tunnel entrance and exit.
- The rear of vehicle ahead is small, such as an unladen truck.
- A detectable object ahead performs emergency acceleration, deceleration and steering.
- A detectable object ahead is suddenly driven in front of the vehicle.
- There is a bicycle with a special shape ahead, such as a tandem bicycle.
- The vehicle is driven at a very high speed.
- The vehicle is driven on a slope.
- The vehicle is running on a narrow curve.
- The accelerator pedal is depressed hard or the vehicle accelerates quickly.
- The assist function is deactivated or operates abnormally.
- The ESP function is manually disabled.
- The vehicle enters ESP control.
- The surface of the area where the IFC is located or the radar sensor surface is dirty or covered by foreign matters.
- Reverse the vehicle.
- In chaotic traffic conditions.
- The vehicle is towing another vehicle.
- Pedestrians stand on traffic safety islands or bends.
- Pedestrians are completely or partially covered by other objects, such as workers holding ladders, pedestrians holding umbrellas, etc.
- Pedestrians wearing fancy clothes or masks, for example, carnival costumes.
- Poor visibility, such as sunset, night, snow, heavy rain, fog, backlight, etc.

Under the following conditions, the system may also work even if a collision is impossible:

- There are patterns of detectable objects in front of the vehicle.
- This vehicle is overtaking the vehicle that changes lanes or turns right or left.
- This vehicle is overtaking the vehicle that is ready to turn right or left.
- There is a detectable object at the bend entrance.
- The vehicle changes lanes in the process of overtaking the detectable object.
- The vehicle is approaching the front detectable target in the winding lane or when changing the driving route.
- The vehicle runs under portal frames, billboards, road signs, etc.
- There are manhole covers, steel plates and other metal objects in front of the vehicle.

- The vehicle approaches a roadside telegraph pole, railing, tree, etc.
- When driving through grass, branches, banners and other objects that may come into contact with the vehicle.
- When driving near an object that reflects radio waves.

⚠ WARNING

The AEB must be disabled in the following situations:

- **The vehicle is towed.**
- **The vehicle is on a chassis dynamometer.**
- **A radar sensor or IFC sensor has a fault.**
- **The radar sensors are under external force (such as in case of rear-end collisions).**

⚠ WARNING

- **FCM can improve the driving safety, but it is still subject to the limitations of laws of physics, and thus shall never be used for risky driving. The driver must be ready to apply the brakes to reduce the vehicle speed or avoid obstacles at all times.**
- **The FCM only provides warning and collision mitigation for vehicles/ pedestrians detected by the radar and IFC, so there may be no response or a certain delay in the response. Therefore, the driver shall apply the brake if necessary instead of waiting for the FCM to operate.**
- **The FCM only provides the driver with a warning to avoid collision and limited braking to reduce the collision injury. It is impossible to prevent the vehicle from accidents or personal injuries autonomously. The driver must always control the vehicle and take full responsibility for the speed of the vehicle and the distance from other vehicles.**

⚠ WARNING

- **When the FCM is turned on, the driver must always keep control of the vehicle during driving, and take full responsibility for the speed of the vehicle and the distance from other vehicles.**
- **Never ignore any suddenly activated warning lamp and reminder displayed on the instrument cluster, otherwise a traffic accident and even serious injuries may occur.**
- **Therefore, the driver shall always observe traffic conditions instead of completely relying on the active brake assist function. As it is only a driver assistance function, the driver shall be fully responsible for keeping a proper distance from the vehicle ahead, controlling the speed and braking in time. Prepare for braking or steering if necessary.**

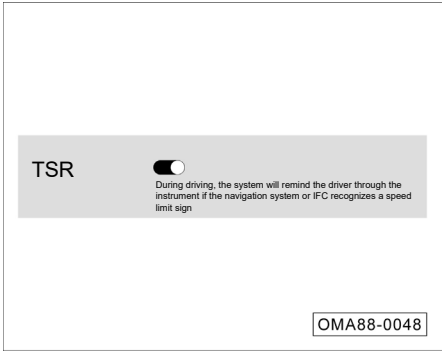
NOTE

- The FCW alerts and the active brake assist function's intervention in braking can be stopped by depressing the accelerator pedal or turning the steering wheel.
- In a complex driving environment (such as traveling on a circuitous road), the FCW and active brake assist functions may give an unnecessary warning and brake the vehicle unnecessarily.
- When the active brake assist function is activated, the vehicle will be braked, and the foot may feel hard or vibration from the brake pedal, which is normal.
- When AEB is negatively affected by the environmental factors (for example, electromagnetic interference or the target itself), the detection function will be interfered and the AEB performance will be degraded.

5.4.4 Traffic sign recognition (TSR)

Traffic sign recognition is abbreviated as TSR. TSR provides the driver with speed limit information by detecting speed limit signs ahead on the road through the IFC installed on the front windshield and according to data from the navigation of the AV system, and alerts the driver to overspeed when the speed limit is exceeded.

On and Off


TSR
During driving, the system will remind the driver through the instrument if the navigation system or IFC recognizes a speed limit sign
OMA88-0048

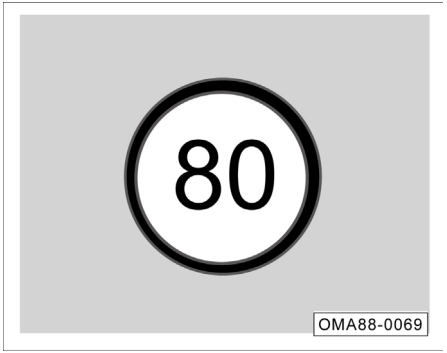
TSR can be set to ON/OFF via the AV system display.

After this function is turned on, if the IFC recognizes the speed limit sign on the road ahead, the speed limit value will be displayed on the instrument cluster; if the current vehicle speed displayed on the instrument cluster exceeds a certain threshold over the speed limit, the speed limit sign icon on the instrument cluster will keep flashing.

NOTE

The system has a switch state memory function. After the vehicle is started, the switch state will be the same as that when the vehicle was turned off last time.

Display interface description

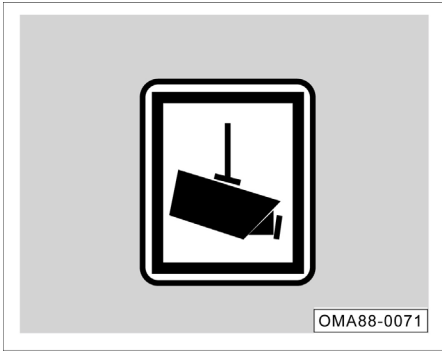


If the instrument cluster displays the symbol above, it indicates the recognized speed limit conditions, covering but not limited to general speed limit signs, combined speed limit signs and divided lane speed limit signs.

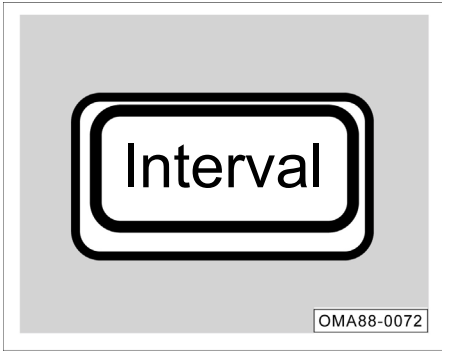
When the actual speed of the vehicle is slightly higher than the speed limit indicated by the instrument, the speed limit symbol on the instrument cluster will flash for a period of time.

⚠ WARNING

To avoid distracting the driver frequently, the overspeed alert will only be triggered once under the conditions of constant road speed limit and continuous overspeed; therefore, the driver shall drive carefully, pay attention to the vehicle speed, rather than overly rely on this function.



If the instrument cluster displays the symbol above, it indicates that there is a traffic enforcement camera on the current road for speed measurement and monitoring.



If the instrument cluster displays the symbol above, it indicates that the vehicle is about to enter or is in the interval speed measurement section.

Functional limitation

The TSR, even activated, may involve wrong or failed detection of speed limit sign due to inevitable environmental factors and conditions. The system may be affected or inoperative under the following conditions:

- The IFC is blocked or disturbed by strong light.

- At night or when the light is weak in the tunnel, the headlamp is not turned on or the headlamp cannot fully illuminate the speed limit sign.
- The speed limit sign is partially or completely blocked.
- The speed limit signs are worn, blurred or smudged.
- The speed limit sign is not properly placed, such as involving twisting or tilting.
- The speed limit sign is blocked by vehicles and obstacles in the next lane.
- The speed limit has been changed due to temporary road construction.
- Navigation data is not updated online in time or inaccurate.
- The road is not standardized. Other road signs are mistakenly identified as speed limit sign.
- Inaccurate navigation and positioning results in the output of non-local road speed limit information.

⚠ WARNING

- **The TSR can only recognize speed-related signs instead of other signs on the road.**
- **The TSR can only identify the maximum speed limit of the road. Do not rely on TSR to determine the appropriate driving speed. Always drive within the safe speed range according to the speed limit and road conditions.**
- **The TSR can only work under some conditions. The driver shall always assume the ultimate responsibility for safe driving and comply with applicable laws and road traffic rules.**

5.4.5 Intelligent speed limit adaptive cruise control (ISL-ACC)

The Intelligent Speed Limit Adaptive Cruise Control is abbreviated to ISL-ACC. When there is a speed limit sign in the front path, the ISL-ACC issues a target vehicle speed following prompt according to the information obtained by the traffic sign recognition (TSR), and the driver chooses whether to follow the speed of the target vehicle of the Cruise Control.

Activation and deactivation

ISL-ACC can be set to ON/OFF via the AV system display.

When this function is activated, the TSR function is activated synchronously; when this function is deactivated, the TSR function remains in the previous state.

NOTE

The system has the button state memory function, so when the vehicle is restarted, the button will be in the state before last shutdown.

ISL-ACC trigger requirements

To trigger the ISL-ACC, the following requirements shall be met:

- ISL-ACC is turned on.
- ACC is working.
- The current target speed of ACC minus the speed limit recognized by the TSR is higher than the speed difference set in the system.
- The TSR identifies the speed limit sign for the first time or the vehicle speed changes after the speed limit sign is identified.

After the ISL-ACC is triggered, the driver will be prompted whether to synchronize the TSR within the next 5 seconds.

ISL-ACC synchronized target cruising speed

When a speed limit sign is recognized and a text prompt pops up on the instrument cluster:

1. If the driver presses the OK button, it indicates that the driver agrees to synchronize the speed limit sign, and the ACC target speed is set to the speed shown on the current traffic sign.
2. If the driver does not operate the OK button about 5s after the prompt message is shown, it means that the driver has not taken the synchronous speed limit prompt, and the ACC target speed remains unchanged.

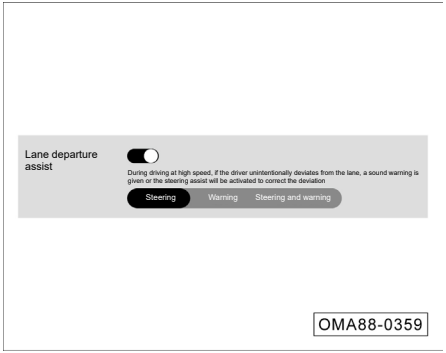
5.4.6 Lane keeping assist (LKA) system

The LKA is designed to reduce accidents caused by unintentional lane departure.

The LDW detects the lane markings on the road through the IFC installed on the front windshield, analyzes the action of the driver and moving status of the vehicle, and gives a warning or intervenes in turning of the steering wheel for corrective steering adjustment when the vehicle unintentionally drifts out of lane due to fatigue, distraction or phone calls of the driver. It usually gives a warning or interferes with the steering wheel when the front wheel crosses a lane marking.

When the driver selects “Steering” or “Steering and Warning” as the LKA mode and the operating conditions of the LKA have met, the system monitors the torque applied to the steering wheel. When the driver keeps his hands off the steering wheel for a long time, the system will alert the driver.

On and Off


Lane departure assist
During driving at high speed, if the driver unintentionally deviates from the lane, a sound warning is given or the steering assist will be activated to correct the deviation
Steering
Warning
Steering and warning
OMA88-0359

LDW can be set to ON/OFF in the Settings interface of AV system display.

When the function is turned on, the button will be in on state, and the LKA indicator lamp on the instrument cluster will come on; when the function is turned off, the button will be in off state, and the LKA indicator lamp on the instrument cluster will go out.

The system has a switch state memory function. After the vehicle is started, the switch state will be the same as that when the vehicle was turned off last time.

Selecting the LKA mode

With the START/STOP button in “ON” position, select LDW in the LDW setting interface of the A/V system display.

1. Steering

- When “steering” is selected, the system only intervenes in the steering wheel for corrective steering adjustment.

2. Warning

- The system only issues a warning when the “Warning” is selected.

3. Steering and warning

- When the “Steering and Warning” is selected, the system will both warn and intervene in the steering wheel for corrective steering adjustment.

The system has an LKA mode memory function. After the engine is started, the LKA mode choice will be the same as the last time when the engine was shut down.

Alarm prompt

The lane departure warning is only activated when “Warning” or “Steering and warning” has been selected as the LKA mode.

- When the instrument displays the vehicle speed of greater than 65km/h and the system detects at least one valid lane marking, the blue status indicator lamp of the instrument cluster lights up. It indicates that the system meets the activation conditions at this time, and a lane departure warning will be issued when the vehicle deviates from the lane. When there is a lane marking only on one side, the system only gives an alarm for that side.

When the indicator lamp is blue, the system may not issue a warning and the indicator lamp turns white if the vehicle departs from the lane under any of the following conditions.

- Step on the brake pedal for deceleration with great braking force.
- Turn on the turn signal lamp on the corresponding side.
- Turn on the hazard warning lamp.
- Turn the steering wheel quickly.
- Short time from last alarm.
- Keep driving on a lane marking.
- The system prompts the driver to take over due to the fact that the driver’s hands are off.

When the indicator lamp is blue, if there is no action mentioned above, and the vehicle deviates from the lane (for example, the vehicle deviates unexpectedly from the lane due to driver's fatigue, distraction, or a phone call), the system sends a warning to the driver, and displays the red lane marking prompt through the instrument cluster, accompanied by an alarm sound.

Steering assist

The corrective steering adjustment indication of lane departure warning system is triggered only when the assist mode is "Steering" or "Steering and warning".

When the instrument shows a speed greater than 65 km/h and the system detects a valid lane marking at least on one side, The indicator lamp on the instrument cluster comes on in blue. It is indicated that the system may intervene in the steering wheel for corrective steering adjustment at this time. When only the lane marking on one side is identified, the system only gives a lane departure warning for that side.

When the indicator lamp is blue, the system will not intervene in the steering wheel for corrective steering adjustment if the vehicle departs from the lane under one of the following conditions.

- Step on the brake pedal for deceleration with great braking force.
- Turn on the turn signal lamp on the corresponding side.
- Turn on the hazard warning lamp.
- Turn the steering wheel quickly.
- Short time from last alarm.
- Keep driving on a lane marking.
- The system prompts the driver to take over due to the fact that the driver's hands are off.

When the system intervenes in the steering wheel for corrective steering adjustment, the driver can feel the torque applied by the system to the steering wheel and the instrument cluster displays a blue lane marking prompt.

Hands-on reminder

When the LKA detects that the driver's hands are off the steering wheel for a long time, it will give a takeover prompt with the visual symbol above plus an audible alarm. For some models, a seat vibration alert will also be triggered.

The driver shall immediately hold the steering wheel immediately after receiving the hands-on reminder. Do not panic and avoid turning the steering wheel sharply unnecessarily. After the LKA recognizes that the driver is holding the steering wheel by detecting the torque manually applied to the steering wheel, the hands-on reminder disappears. Meanwhile, the LKA is automatically reactivated.

NOTE

The condition that the driver's hands are lightly holding on the steering wheel may be misinterpreted by the ICA system as the steering wheel out-of-hand. In this case, when the system issues a steering wheel hands-on reminder, the driver only needs to hold the steering wheel tightly or shake the steering wheel slightly, so that the system can detect the torque applied to the steering wheel. Afterwards, the hands-on reminder will disappear.

Other indications

When the system detects that the IFC is blind, a text reminder reading "The front camera is blocked" will pop up on the instrument cluster.

Usually, this is caused by dirty front windshield or the IFC exposed to low direct sunlight, etc. The LKA will not be damaged as a result and will also not require maintenance.

The driver can try to wipe the front windshield with water spray.

When the system detects a fault, the text reminder reading "Please check the LKA" will pop up on the instrument cluster, and the indicator lamp will come on in yellow. In this case, please go to the GAC Motor authorized shop for inspection in time.

Functional limitation

Even if the lane departure system is turned on and working, it may detect lane marking incorrectly or does not detect it at all due to unavoidable environmental factors and conditions. The system may be affected or inoperative under the following conditions:

- Poor visibility due to snow, rain, fog, spray, etc.
- Dirty or foggy front windshield, or obstructed IFC on the front windshield.
- High ambient temperature around the IFC due to direct sunlight.
- Glare is caused by direct sunlight, oncoming vehicles, reflected light from road with accumulated water, etc.
- Sudden changes in outdoor brightness, such as entering/exiting tunnels.
- Headlamp not turned on at night or when the lighting is dim in tunnels.
- No lane marking, or difficulty in distinguishing the lane marking color from the road surface color.
- The lane marking is not obvious, too fine, worn, blurred or covered with dirt and snow.
- The number of lanes increases or decreases, or the lane markings are complicated.
- There are more than two lane markings on the left and right sides of the vehicle.
- Markings or objects resembling lane markings are on the road.
- Isolation strips or other objects casting shadows on lane markings.
- Short-term change of marking, such as ramp or expressway exit.
- Driving on steep slopes or winding roads.
- Being too close to the vehicle in front or driving of the vehicle in front blocks the lane marking.
- Severe shaking of the vehicle.

The performance of the system's intervening in the steering wheel for corrective steering adjustment may be affected in the following situations:

- The vehicle is overloaded.
- The tire pressure is abnormal.
- The road surface is uneven.
- The crosswind is strong.
- The driver modifies the parts related to vehicle control.
- Replace the vehicle control-related parts with non-original matching parts.
- Improper assembly of vehicle handling related parts.

NOTE

When the lane departure warning system intervenes in turning of the steering wheel for corrective steering adjustment, the driver may still turn the steering wheel to control the vehicle. When the driver feels that the correction torque applied by the system is improper, he/she can control and drive the vehicle as his/her attention at any time.

CAUTION

- When the LKA detects an unintended deviation from the lane, it will send out a warning or intervene in the steering wheel for corrective steering adjustment. Do not be panic or unnecessarily turn the steering wheel sharply.
- When the LKA detects that the driver's hands have been off the steering wheel for a long time, it will give a warning. Do not panic, or hit or shake the steering wheel unnecessarily. The driver can hold the steering wheel tightly with both hands for normal driving.
- When "Warning" is selected as the LKA mode, the system will not issue the steering wheel intervention and takeover prompt. When "Steering" is selected as the LKA mode, the system will not issue a warning.

WARNING

- **The LKA is only an auxiliary system and cannot actively control the vehicle to change lanes or keep lanes. The driver must always check the road conditions, hold the steering wheel and actively control the vehicle.**
- **Improper or careless use of LKA may cause accidents. Do not rely on LKA or try dangerous driving with the help of LKA.**

⚠ WARNING

- **LKA does not always recognize lane markings and lane edges. Due to bad weather, poor night lighting, accumulated water and snow on the road surface, broken or blurred lane markings, shadows cast on the road surface, etc., lane markings or lane edges may be missed or misidentified.**
- **As a result, there may be missing triggering and false triggering of the function. Therefore, the driver must concentrate on observing the road and traffic conditions and drive carefully.**

⚠ WARNING

- **Protect the IFC against strong impact, moisture or heat; and never remove and refit any part without authorization. Do not place reflective objects on the instrument panel, which not only are easy to dazzle the driver but also may reflect the light to the field of view of the IFC, affecting normal operation.**
- **Do not color or coat the front windshield with any material not meeting the corresponding specifications. Any additional objects that negatively affecting the sight of the IFC may lead to improper operation of the system.**
- **Avoid impact on or modification of the bumper or vehicle body; otherwise the LKA system may operate abnormally.**

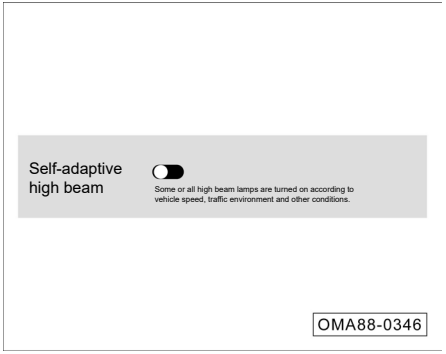
⚠ WARNING

- **If the system fails to detect the lane marking or judges that the driver deliberately deviates from the lane (for example, detected fast turning of the steering wheel), or the vehicle speed is not less than 130km/h or not higher than 60km/h, the LDW will not issue a warning or perform steering intervention even if the vehicle deviates or departs from the lane.**
- **The system can only adjust limited steering angle, so it can't promise that the vehicle will be driven back into the lane under any circumstances.**
- **The sound inside the vehicle or the noise outside the vehicle may prevent you from hearing the warning sound, so there is no guarantee that you can be reminded of the alarm given by the LKA under any circumstances.**

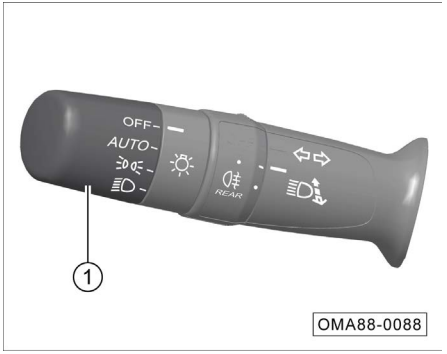
5.4.7 Adaptive driving beam (ADB)

Adaptive driving beam system (ADB) is an intelligent high beam control system that can adaptively switch the high/low beam according to road conditions. According to the driving status of the vehicle, the environmental status and the status of other vehicles on the road, the ADB system automatically turns on or off the high beams to assist the driver; according to the position of other vehicles in the front view of own vehicle, the high/low beam is adaptively switched to avoid dazzling other road users.

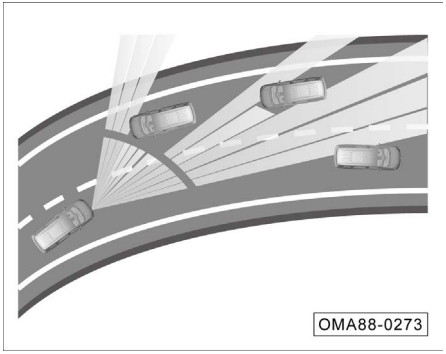
Activating adaptive driving beam system


Self-adaptive high beam
Some or all high beam lamps are turned on according to vehicle speed, traffic environment and other conditions.
OMA88-0346

1. With the START/STOP button in “ON” position, the ADB can be set to ON/OFF via the AV system display. After turned on, the ADB enters the standby state, and once it is turned off, the ADB cannot be activated.



2. Turn the lamplight switch to the position ① and in the low beam position. Provided that the ambient light is dim and the low beams are automatically turned on, if the vehicle speed is greater than 25km/h, the ADB is allowed to be activated. At this time, the high beams enter the intelligent control state. If the vehicle speed is lower than 15km/h, the ADB will be automatically disabled.



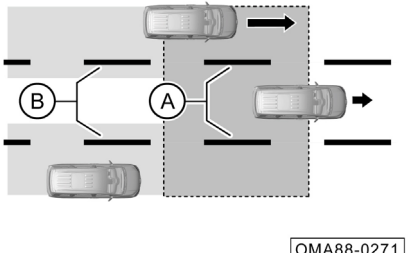
- If the IFC detects that there are rows of street lights on the current road, the high beams will not automatically turn on.
- On roads without street lights, the system will automatically switch the beam type according to the position of the vehicle ahead to avoid dazzling the driver of the vehicle ahead, while keeping high beams on in other areas.

CAUTION

- In severe weather such as heavy fog (fog lamps are manually turned on) or heavy rain (the wipers are quickly moving), to ensure driving safety, the high beams will not be turned on automatically.
- The high beams will not automatically turn on when the parts involved fail or there is a system failure.

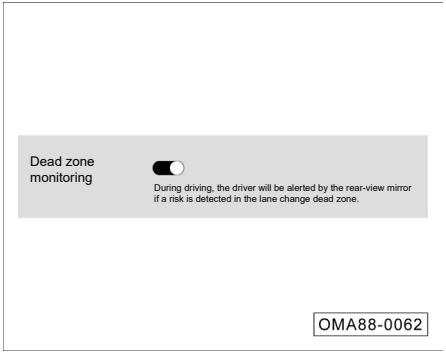
5.4.8 Blind spot detection (BSD) system

The BSD system detects the vehicles in the blind spot of the exterior rearview mirror and the area behind the blind spot via the BSD sensor installed at the rear of the vehicle. If it is detected that another vehicle is approaching quickly, the RCTA alerts the driver through the visual signal on the exterior rearview mirrors and the panoramic image.



- A: Blind spot in the adjacent lane.
- B: Area behind the blind spot.

On and Off


Dead zone monitoring
During driving, the driver will be alerted by the rear-view mirror if a risk is detected in the lane change dead zone.
OMA88-0062

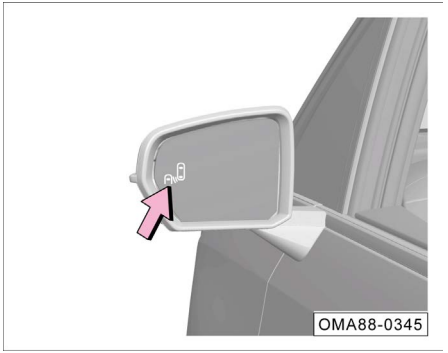
With the START/STOP button in “ON” position, the BSD can be set to ON/OFF in the Settings interface of the A/V system display.

If the BSD system is switched on properly, the indicator lamp on exterior rearview mirrors temporarily will come on, and the indicator lamp on the instrument cluster will turn green. If a fault is detected in the BSD system, the indicator lamp on the instrument cluster will turn yellow, and a fault indication will be shown on the instrument cluster display. If the system is turned off, the indicator lamp goes out.

NOTE

The on/off state and selected mode of this system can be memorized. After the engine is started, the on/off state and mode will be the same as those when the engine is shut down last time.

How it alerts the driver



The BSD system alerts the driver via the yellow indicator lamp on the exterior rearview mirror, whose illuminance can be adjusted automatically according to the ambient light.

CAUTION

When the vehicle is started or the system is turned on, the yellow indicator lamp on the exterior rearview mirror will be on for 2s, indicating that the function is turned on normally.

Working conditions

Under the following three conditions during driving (vehicle speed >15km/h):

- Other vehicles enter the blind spot from the rear or side.
- There are vehicles approaching quickly from the rear in the adjacent lane.
- Vehicles enter the blind spot from the front, and these vehicles stay in the blind spot for more than a period of time.

The BSD system issues an alarm and the indicator lamp on left/right exterior rearview mirror comes on, and if the turn signal lamp on the same side is activated in this case, the indicator lamp flashes to alert you that it is risky to change lane.

CAUTION

When the vehicle overtakes quickly, vehicles staying in the blind spot for a short time will not activate the alarm.

False alarm

When there is no vehicle in blind spots, the system may issue a false alarm in the following conditions:

- Road guardrails.
- Expressway concrete walls.
- Building area.
- A sharp turn around the building.
- Shrubs and trees.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

Radar sensor

The BSD radar sensors are installed as shown above.

CAUTION

Make sure that the area around the sensors on the rear bumper is not covered by ice, snow or other objects.

If any sensor is interfered, the system performance will be degraded and the instrument cluster will display a prompt “BSD sensor is blocked” and issue an alarm. The system will automatically return to normal if any of the following conditions is met:

- Two vehicles are detected on both sides of the vehicle.
- Set the START/STOP button to OFF position and restart the engine.

If the sensor is still interfered with after the vehicle has been restarted, the reminder will be given again and an alarm will be issued. If a prompt “Please check side assist system” is displayed on the instrument cluster, it indicates that the system is faulty, so please go to the GAC Motor authorized shop for inspection in time.

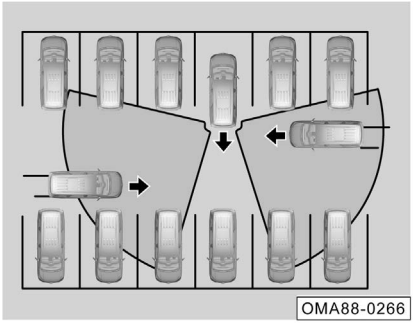
The BSD system may not work properly or even be inoperative under the following special conditions:

- The detected target is too small, such as a bicycle, an electric segway, etc.
- The target is stationary.
- The weather is too severe (such as rain, snow, etc.).
- The vehicle is running on a curved road, a ramp, etc.

⚠ WARNING

- **The BSD is only a driver assist system, and thus it cannot be substituted for the driver to observe the external traffic conditions or to make judgments.**
- **The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD sensor to ensure safety.**

5.4.9 Rear crossing traffic alert (RCTA) system*



The rear crossing traffic alert (RCTA) system detects blind spots on both sides of the rear of the vehicle via the BSD sensor installed at the rear of vehicle. If it is detected that another vehicle is approaching quickly during reversing, the RCTA alerts the driver through the visual signal on the exterior rearview mirrors and the panoramic image. When necessary, the system will actively brake to reduce the risk of collision.

⚠ WARNING

- **The RCTA is only a driver assist system, and thus it cannot be substituted for the driver to o**
- **The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD sensor to ensure safety.**

On and Off

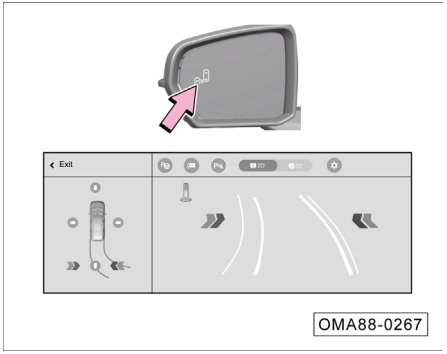
With the START/STOP button in “ON” position, the RCTA can be set to ON/OFF in the Settings interface of the A/V system display.

When the engine is started or the system is turned on, the indicator lamp on the rearview mirror will stay on for 2s, indicating that the system is switched on normally.

i NOTE

The system has a switch state memory function. After the vehicle is started, the switch state will be the same as that when the vehicle was turned off last time.

How it alerts the driver



- Visual reminder: Visual prompt: the RTCA alerts the driver via the yellow indicator lamp on the exterior rearview mirror and the red flashing arrow on the incoming vehicle side in the panoramic image. The illuminance of indicator lamp can be automatically adjusted according to the ambient light.
- Audible reminder: there will be an audible alarm as a supplementary reminder at the same time.
- Active braking: When the braking mode is activated and the risk of a collision continues to increase, the system actively applies brakes. The driver can select the desired alarm method in the AV system.

NOTE

The RCTA warning method can be set to “warning” or “warning and brake” in the Settings interface of the AV system display.

Working conditions

Function activation must meet the following conditions:

- The vehicle is in reverse state and the gear is in R gear.
- The vehicle speed is less than 10 km/h.
- The switch is on and the function is not faulty.

When the radar detects that the vehicle is reversing and some other vehicles are rapidly approaching the vehicle on both rear sides with a risk of collision, a prompt will be issued through the following methods:

- On the side with risk of collision, the yellow indicator lamp on the exterior rearview mirror flashes.
- In the panoramic image, a red light bar will flash on the dangerous side of the rear of the vehicle.
- The system will issue an audible alarm as a supplementary reminder.
- When the driver selects the assist mode as “Warning and braking”, the system will actively activate the brakes until the vehicle comes to a standstill.

CAUTION

The function cannot detect objects behind other vehicles or obstacles.

False alarm

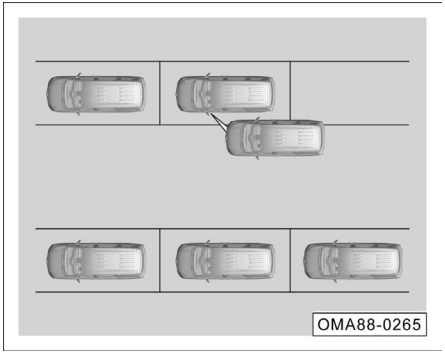
When there is no vehicle in the detection area, the system may issue a false alarm in the following conditions:

- Road guardrails.
- Expressway concrete walls.
- Building area.
- A sharp turn around the building.
- Shrubs and trees.
- When parking, it is too close to the rear vehicle.
- The vehicle is in an indoor parking area.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

5.4.10 Door open warning (DOW) system*



The door open warning (DOW) system uses the BSD sensor installed at the rear of the vehicle to detect the adjacent lane during parking, and when another vehicle is detected approaching quickly and will cause risk of collision if the door is opened, alerts the driver via the visible signal on the exterior rearview mirror and the audible alarm.

⚠ WARNING

- **The DOW is only a driver assist system, and thus it cannot be substituted for the driver to observe the external traffic conditions or to make judgments.**
- **The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD sensor to ensure safety.**

On and Off

With the START/STOP button in “ON” position, the DOW can be set to ON/OFF in the Settings interface of the A/V system display.

i NOTE

The system has the button state memory function, so that when the vehicle is restarted, the system will work at the state before last shutdown.

How it alerts the driver

1. The DOW alerts the driver via the yellow indicator lamp on the exterior rearview mirror. The indicator lamp can automatically adjust the brightness according to the external lighting conditions.
2. During door opening, if the radar detects an approaching vehicle behind on either side, the system will trigger an alarm and the door ambient light will flash in red.

Working conditions

Function activation must meet the following conditions:

- The vehicle is in parking state.
- The START/STOP button is in “ON” position, or in 3min after the START/STOP button is switched from “ON” to “ACC” or “OFF” position.
- The switch is on and the function is not faulty.

When the radar detects a vehicle behind in the adjacent lane and there is a risk of collision if the driver opens the door, the warning lamp on the exterior rearview mirror on the danger side will come on in yellow. If the driver continues to open the door, the warning lamp flashes, the door ambient light flashes in red, and an audible alarm will be issued.

CAUTION

The function cannot detect objects behind other vehicles or obstacles.

False alarm

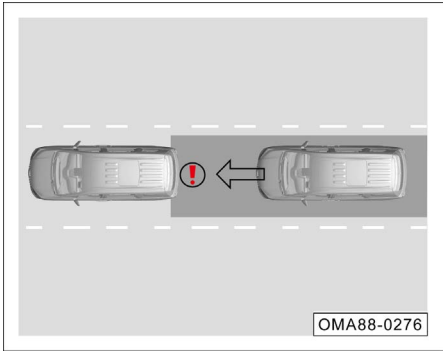
When there is no vehicle in the BSD area, the system may issue a false alarm in the following conditions:

- Road guardrails.
- Expressway concrete walls.
- Building area.
- Shrubs and trees.
- When parking, it is too close to the rear vehicle.
- There is a larger vehicle behind.

CAUTION

The function cannot detect objects behind other vehicles or obstacles.

5.4.11 Rear approach alert system*



The rear approach alert function monitors the target directly behind the vehicle in real time through the blind spot BSD sensors installed at the rear of the vehicle. When the driver drives the vehicle normally on the road and there is a target rapidly approaching in this lane behind, the system will send out an alarm message and a rear-end collision warning signal to the vehicle behind.

CAUTION

The rear approach alert function is only for assist and cannot replace the driver to monitor the external traffic conditions. The driver should always be alert to the surrounding environment.

On and Off

With the START/STOP button in “ON” position, the RCW can be set to ON/OFF in the Settings interface of the A/V system display.

NOTE

The system has the button state memory function, so that when the vehicle is restarted, the system will work at the state before last shutdown.

How it alerts the driver

The rear approach alert function automatically activates and quickly flashes the hazard warning lamps to alert the rapidly approaching vehicles behind.

Working conditions

Function activation must meet the following conditions:

- The vehicle is started and is in non-reverse gear.
- The switch is on and the function is not faulty.

When the radar detects that there is a vehicle approaching at a high speed in this lane behind, the function will be activated to alert the driver in the vehicle behind to reduce the risk of rear-end collision.

CAUTION

- This function cannot detect objects behind another vehicle or obstacle.
- When the vehicle behind is moving too fast, this function may not issue an alarm in time.
- This function does not trigger an alarm when the driver has turned on the hazard warning lamp switch.

False alarm

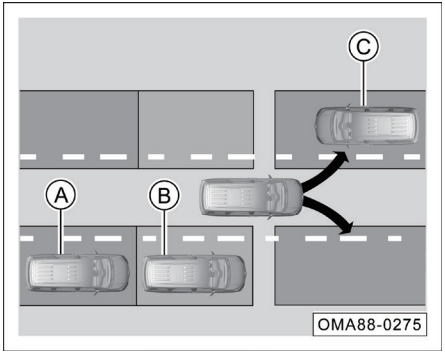
When there is no vehicle in the BSD area, the system may issue a false alarm in the following conditions:

- The vehicle is in a parking lot.
- The vehicle is on uneven roads.
- Building area.
- Shrubs and trees.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

5.4.12 Emergency lane keeping aid system*



- A: Blind spot in the adjacent lane.
- B: Area behind the blind spot.
- C: incoming area in the adjacent lane.

The emergency lane keeping aid function monitors the adjacent lane area in front and behind the vehicle in real time through the rear BSD sensor, IFC and front MMW radar. When the vehicle deviates from the lane and there is a risk of collision with vehicles in the adjacent lane, the system will alert the driver and actively keep the vehicle in the lane to reduce the risk of collision.

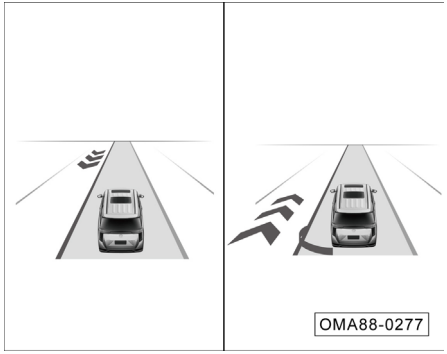
On and Off

With the START/STOP button in “ON” position, the LKA can be set to ON/OFF in the Settings interface of the A/V system display.

NOTE

- When the driver turns on the emergency lane keep assist function, the BSD is automatically turned on.
- The system has the button state memory function, so when the vehicle is restarted, the system will be in the state before last shutdown.

How it alerts the driver



- Visual alarm: there will be a visual alarm on the instrument cluster, the lane marking on the danger side will turn red, and the dangerous target vehicle will turn red as a reminder. If the BSD alarm conditions are met at this time, the indicator lamp on the exterior rearview mirror will come on.
- Steering assist: the system will actively control the steering wheel to keep the vehicle in its own lane, and the driver can feel the torque exerted by the system on the steering wheel.

Working conditions

Function activation must meet the following conditions:

- The vehicle is set to the drive gear and the vehicle speed is greater than 65km/h.
- The BSD system is activated.
- The BSD system and the lane departure warning system are not faulty.

When it is detected that the vehicle is at risk of changing lanes, the system actively controls the steering and issues a reminder on the instrument cluster.

CAUTION

- The emergency lane keep assist is only a driver assistance function, and cannot replace the driver's monitoring on the traffic conditions. The driver should always be alert to the surrounding environment.
- The driver shall always hold the steering wheel to actively control the vehicle.

CAUTION

- When the road environment cannot meet the operating conditions of the lane departure warning system, this function may not work properly. => See page 202
- When the forward radar does not work properly, this function does not work yet.
- When the BSD does not work properly, the function may not work properly.
- When the system detects that the driver's hands get off the steering wheel for a long time, it issues a warning. In this case, don't panic or turn the steering wheel hard. The driver can hold the steering wheel tightly with both hands for normal driving.
- When the system intervenes in turning of the steering wheel for assistance, the driver can still turn the steering wheel to control the vehicle. When the driver feels that the correction torque applied by the system is improper, he/she can control and drive the vehicle as his/her attention at any time.

False alarm

When there is no vehicle in the detection area, the system may issue a false alarm in the following conditions:

- Poor visibility due to snow, rain, fog, spray, etc.
- Dirty or foggy windshield, or obstructed IFC.
- High ambient temperature around the IFC due to direct sunlight.
- Glare is caused by direct sunlight, oncoming vehicles, reflected light from road with accumulated water, etc.
- Sudden changes in outdoor brightness, such as entering/exiting tunnels.
- Headlamp not turned on at night or when the lighting is dim in tunnels.
- No lane marking, or difficulty in distinguishing the lane marking color from the road surface color.
- The lane marking is not obvious, too fine, worn, blurred or covered with dirt and snow.
- The lane is too wide or too narrow.
- The number of lanes increases or decreases, or the lane markings are complicated.
- There are more than two lane markings on the left and right sides of the vehicle.
- Markings or objects resembling lane markings are on the road.
- Short-term change of marking, such as ramp or expressway exit.
- Driving on steep slopes or winding roads.
- Being too close to the vehicle in front or driving of the vehicle in front blocks the lane marking.
- Severe shaking of the vehicle.
- The vehicle passes by road guardrails, highway concrete walls, trees, shrubs, etc.
- The vehicle passes over speed bumps or potholes.
- The vehicle passes through dense buildings.
- Driving on steep slopes or winding roads.
- The forward radar and the left and right rear BSD radars are covered with dirt, rainwater or snow.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

The performance of the system's intervening in the steering wheel for corrective steering adjustment may be affected in the following situations:

- The vehicle is overloaded.
- The tire pressure is abnormal.
- The road surface is uneven.
- The crosswind is strong.
- Any part involved in vehicle control is modified or replaced with a non-genuine part.
- Improper assembly of vehicle handling related parts.

5.4.13 Radar and camera sensor

MMW radar sensor

The MMW radar sensor is installed in the middle of the front bumper grille to monitor the traffic conditions and detect the front vehicles at a certain distance from the vehicle.

The MMW radar sensor must be adjusted and calibrated under the following conditions:

- The fixing bracket of the MMW radar sensor is removed and then refitted;
- The MMW radar sensor is removed and then refitted;
- The toe-in or rear wheel camber is adjusted during the four-wheel alignment;
- The vehicle suffers a collision.

NOTE

- Specific special tools and equipment shall be used for MMW radar sensor adjustment and calibration. If adjustment and calibration of a radar is required, please go to the GAC Motor authorized shop for relevant operation.
- When the MMW radar sensor fails or is maladjusted, the ACC, ICA and FCW may be affected.

Special instructions on MMW radar sensor

The MMW radar sensor is installed in the front of the vehicle. No obstacles shall be present within the detection range of the MMW radar sensor. Do not install obstacles such as license plate frame when installing the front license plate. Otherwise, the detection performance of the MMW radar sensor will be affected, resulting in failure of systems such as ACC, ICA and FCW.

CAUTION

- If the MMW radar sensor is dirty, blocked by the license plate frame, or covered by any foreign matters such as heavy rain, ice, snow, mud, the related functions of the radar sensor may not work and the instrument cluster will give disable/fault indication for these functions. To restore these functions to normal, clean the dirt and/or foreign matters.
- When there is strong reflection of the MMW radar, such as in parking lots, the related functions of the radar sensor may be affected.
- Prevent the front and surrounding of the MMW radar from being covered by objects like sticker, driving assistance lamp, license plate frame, etc.; otherwise the related functions of the radar sensor may be affected.
- It is recommended that the snow on the sensor is removed with a brush and the ice on the surface is removed with an insoluble de-icer spray.

CAUTION

- Bodywork of the front end of vehicle may change the direction of the MMW radar sensor and affect the related functions of the MMW radar (ACC/ ICA/ FCM). Therefore, please go to the GAC Motor authorized shop for service in time.
- If a MMW radar sensor is damaged or its direction changes, please deactivate the functions relevant to the MMW radar sensor (ACC/ICA/FCW, etc.), and go to the GAC Motor authorized shop for recalibration of the MMW radar sensor in time.
- The direction of the MMW radar sensor may change due to vibration, for example, when the area near the front bumper radar collides with the curb/ flower bed. Changing the direction of the sensor may affect the performance of the functions dependent on the radar or even lead to abnormal shutdown of the system.

IFC

An IFC is installed on the upper part of the front windshield to detect the surrounding environment. It can identify pedestrians not blocked up to 80m away from the vehicle (in case that the environmental factors such as lighting are ideal) with a body height of not less than 0.8m. The IFC sensor must be calibrated under the following conditions:

- The front windshield or IFC bracket is removed and replaced.
- The IFC sensor is removed and replaced.

NOTE

If only the IFC fails, the systems such as the ACC, ICA, lane departure warning, forward collision mitigation system and intelligent high beam will fail as well.

NOTE

- Special tools are required to be used for calibration of the IFC. If the calibration of the IFC sensor is required, please go to the GAC Motor authorized shop for relevant operation.
- When the IFC fails, or is maladjusted or blocked, the systems including ACC, FCW, LDW, ICA and IHC may be affected and will not work properly.

CAUTION

Poor lighting conditions, night, backlight, heavy rain, mist, ice, snow or sludge may affect the IFC, leading to interruption/performance degradation and even failure of FCM, ACC, ICA, AEB, LKA and IHC. In this case, the instrument cluster will display alarm messages relevant to intelligent driving assistance such as “The MRR is blocked”, “The sight of IFC is blocked”, “Please check the LKA”, “Please check the ACC”, “Please check the FCM”, etc.

CAUTION

The field of view of the IFC may be affected by obstructions, such as dust, sediment, water mist, icing, snow or sludge on the front windshield. In these cases, the LKA, FCM, ACC, ICA and IHC will be disabled. Please wipe the area near the camera on the front windshield, or turn on the defrosting and defogging function of the A/C. The functions can return to normal after the obstructions are cleared.

CAUTION

- If the interference of IFC is cleared, the PDS will work normally again.
- Low light conditions at sunset or night may affect the functioning of PDS. It is prohibit to block the sight around the IFC with stickers or opaque objects; otherwise, the pedestrian detection function may not work properly.
- Before driving, please check whether there is any obstacle in the area around the IFC.
- Keep the IFC sensor on the front windshield free from any obstacle.

5.4.14 Tire pressure monitoring system (TPMS)

The tire pressure monitoring system (TPMS) monitors the tire pressure and temperature, and displays the current tire pressure and temperature on the instrument cluster. In case of tire anomalies such as low/high pressure, rapid air leakage and high temperature, the instrument cluster will display various alarm messages.

If the vehicle has not been used for more than seven days or the battery has been disconnected, when the START/STOP button is in “ON” position, the tire pressure and temperature will be displayed as “---” on the instrument cluster, and after the vehicle speed reaches above 25km/h for several minutes, the real-time tire pressure and temperature will be displayed on the instrument cluster.

Alarm description

- If the tire pressure is higher than 330Kpa, the TPMS indicator lamp will come on, and the alarm message about high tire pressure will be displayed on the instrument cluster; when the tire pressure drops below than 300kPa, the fault is eliminated and the tire pressure warning lamp goes out.
- If the tire pressure is lower than 75% of the normal set value, the indicator lamp of the TPM system comes on and the alarm message on the instrument display indicates that the tire pressure is low; when the tire pressure (cold tire pressure) rises to the normal set value, the fault is eliminated and the tire pressure warning lamp goes out.
- If the tire pressure keeps dropping at a rate more than 30kPa/min, the TPMS indicator lamp comes on and the alarm message on the instrument cluster display indicates that the tire has air leakage; when the vehicle is powered on again, the fault is eliminated and the tire pressure warning lamp goes out.
- If the tire temperature is higher than 85°C, the TPMS indicator lamp comes on, and a text alarm on the instrument cluster indicates that the tire temperature is high; when the tire temperature drops to 80°C, the fault is eliminated and the TPMS indicator lamp goes out.

CAUTION

After replacing the tire pressure sensor or rotating the tires, you do not need to go to the GAC Motor authorized shop for re-learning and calibration, provided that the tire pressure sensor is correctly installed for the model, because the TPMS can automatically complete the learning and calibration in the next few driving cycles.

NOTE

If a spare tire or a new tire is used, because the tire pressure sensor is missing, the low tire pressure alarm does not disappear while you continue to drive. Please do not interpret that as abnormal tire pressure.

5.4.15 Seat vibration alert*

The seat vibration alert system issues a tactile alert to the driver through the vibration motor inside the driver's seat cushion. When the seat vibration alert of the vehicle is turned on and the vehicle is driving and has a certain collision risk, the system will trigger the seat vibration alert.

Turning on/off seat vibration alert

The seat vibration alert of the vehicle is turned off by default. When the START/STOP button is in the "ON" position, the type of alert can be set to "Audible alert" or "Audible alert and seat vibration" on the AV system display.

When "Audible alert" is selected, it indicates that the seat vibration alert of the system is turned off, and only an audible alert is issued when necessary; when "Audible alert and seat vibration" is selected, the system will turn on the seat vibration alert and if there is a risk during driving, the vehicle will issue an audible alert, accompanied by seat vibration.

i NOTE

This setting has memory function. After the engine is started, the selected prompt type will be the same as that when the engine is shut down last time.

Triggering seat vibration alert

The following conditions may trigger the seat vibration alert. after feeling the seat vibration, the driver should observe the road conditions in time and take over the vehicle control:

- There is a risk of collision with vehicles/ pedestrians in front during driving.
- During driving, the vehicle deviates from the lane unexpectedly and is about to cross the lane marking.
- There are vehicles in blind spots, but the driver still turns on the turn signal lamps and tries to change lanes.
- The ICA triggers the takeover prompt because the driver's hands get off the steering wheel for a long time.
- During reversing, vehicles or pedestrians on either side approach the vehicle, resulting in collision risk.

⚠ WARNING

- **Seat vibration alert is only a driver assistance prompt function. The driver shall respond to potential risks of the vehicle in time, rather than rely on the seat vibration alert.**
- **The driver is always responsible for the vehicle safety.**

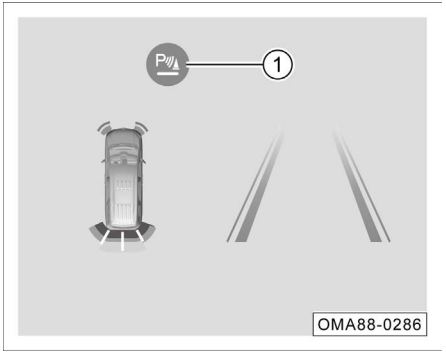
5.5 Parking assist system

5.5.1 Reversing parking aid (RPA)

The system measures the distance between the vehicle and an obstacle via the radar sensors sending and receiving ultrasonic waves reflected from the obstacle.

On and Off

- When the START/STOP button is in the “ON” position, release the parking brake and set the gearshift lever to the “R” position. When the vehicle speed is less than 10km/h, the RPA works.
- When the forward speed is less than 10km/h, the front ultrasonic sensor starts to operate; when the forward speed is greater than 12km/h, the front ultrasonic sensor stop operating; when the forward speed decreases from 12km/h above to 10km/h below, the front ultrasonic sensor starts to operate again.
- When the vehicle speed is greater than 12km/h, the front and rear ultrasonic sensors will stop working; move the shift lever out of the “R” position, and apply the parking brake, so the START/STOP button will exit the “ON” position and the reversing parking aid system is out of work.

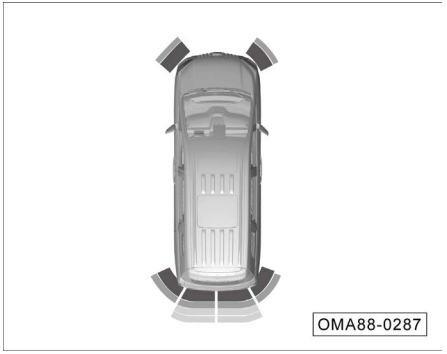


During reversing, when the RPA is turned on, press the soft key ① to manually turn off the audible alarm, and press it again to turn it on. After the engine is started again, the audible alarm of the RPA is turned on by default.

NOTE

It is recommended to activate the RPA audible alarm when reversing.

Dynamic icon



The dynamic view on the left of the display shows the distance between the front/rear of the vehicle and the obstacle. In the figure, the indication sectors of radar of the vehicle is red-orange-yellow-green from inner side to outer side. When an obstacle is getting closer to the vehicle, the color sections will gradually change from the outermost.

Change of dynamic view is synchronized with that of the distance audible alarm.

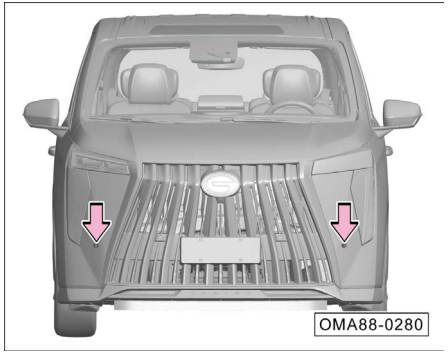
Distance to detected obstacle						Alarm tone level
Front left sensor	Front right sensor	Rear left sensor	Rear right sensor	Rear left middle sensor	Rear right middle sensor	
No indication, no alarm	No indication, no alarm	No indication, no alarm	No indication, no alarm	150~90cm	150~90cm	No audible alarm
90~60cm, image display, and no alarm (non-FAPA); no image display, and no alarm (FAPA)	90~60cm, image display, and no alarm (non-FAPA); no image display, and no alarm (FAPA)	No indication, no alarm	No indication, no alarm	90~60cm	90~60cm	Moderate intermittent audible alarm
60~30cm	60~30cm	60~30cm	60~30cm	60~30cm	60~30cm	Rapid intermittent audible alarm
< 30cm	< 30cm	< 30cm	< 30cm	< 30cm	< 30cm	Continuous audio alarm

Distance audible alarm

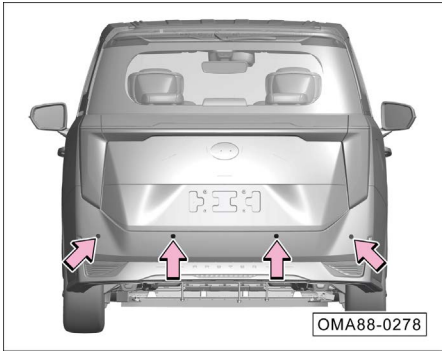
The audible alarm changes with reference to the distance between a detected obstacle and the front and rear bumper, and meanwhile, the color of activated sectors shown on the AV system display changes accordingly:

Distribution of RPA sensors

For non-FAPA models:

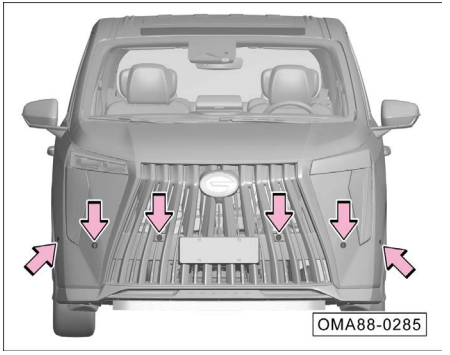


Front corner radar sensors are mounted on the front bumper. There are only two front corner radar sensors on the front bumper. They are arranged near the corners, and can only detect local corner areas, with large blind spots left in front of the vehicle.

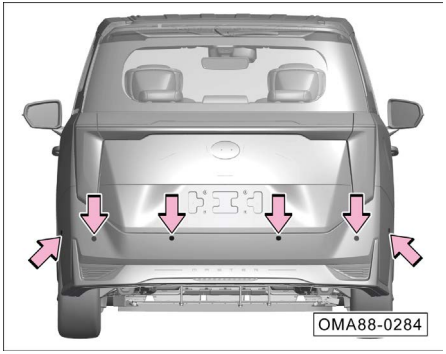


The rear ultrasonic radar sensors are installed on the rear bumper.

For FAPA models:



The front ultrasonic radar sensors are installed on the front bumper cover.



The rear ultrasonic radar sensors are installed on the rear bumper cover.

CAUTION

- Always keep the surface of the RPA sensors clean and never cover a RPA sensor.
- Keep the RPA sensors on the bumpers clean and protect them from freezing to ensure the RPA sensors operate properly.
- Clean the RPA sensor surface with a piece of soft damp cloth to avoid scratching.

⚠ WARNING

- **The RPA cannot replace the driver's observation of the surrounding environment. The driver should concentrate on reversing safely and adjusting the parking position according to the actual situation.**
- **The RPA sensors have blind spots while they are detecting obstacles. During reversing, the driver shall observe the surrounding environment carefully to avoid scratches or collisions.**
- **When the vehicle is reversing at a narrow place or on an uphill slope, the RPA sensors may detect railings, trees or slope surfaces, which is normal.**
- **When the reversing speed is high, the detection accuracy of the RPA sensor reduces. Thus the reversing speed had better not to exceed 10km/h. When the RPA continues to sound an alarm, the vehicle and the obstacle are extremely close, be sure to stop reversing immediately to prevent accidents.**

⚠ WARNING

- **When a high-pressure cleaner is used, clean the RPA sensors in snatches gently, with the nozzle at least 30cm away from the sensor.**
- **If water drops are on the surface of the RPA sensor on the bumper, the sensitivity of the sensor will reduce. Wiping off them can restore the sensitivity of the radar.**

⚠ WARNING

- **The surface of some materials cannot reflect the signal from the RPA sensors, so that the RPA sensors cannot detect such materials or people wearing the clothing made of such materials.**
- **Noise sources outside the vehicle may interfere with the RPA sensors, preventing them from detecting any object.**
- **The RPA sensor is a precision component, which shall not be removed, refitted and repaired without authorization. Otherwise, GAC will not assume any responsibility for the damage arising therefrom.**

5.5.2 Reverse image system*

The reverse image system can cover the video at an wide angle up to 130° and display a wide-range image behind the vehicle on the AV system display to allow the driver to know various complex road conditions behind the vehicle and improve the safety of reversing.

Activation and deactivation

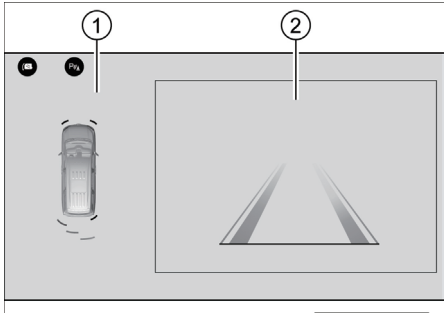
With the START/STOP button in “ON” position, the reverse image system will automatically start working if the gearshift lever is moved to the “R” position. In this case, the AV system display will begin to show the image behind the vehicle together with the dynamic trajectory.

If the gearshift lever is moved out of the “R” position, the reverse image system will automatically stop working and the AV system will exit from the reverse image.

⚠ WARNING

The reverse image system cannot take the place of the driver’s observation of the surrounding environment. The driver shall focus on safe reversing and position adjustment according to the practical conditions.

Dynamic trajectory



The display shows the wheel trajectory and the body driving trajectory:

① RPA display area

② Reverse image display area

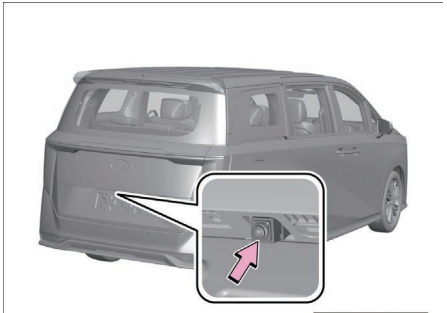
CAUTION

The above trajectory is the reference distance obtained by testing on flat ground and is only used as a reference for judging visual distance. In case of driving on a slope, the above tracks may have deviations.

NOTE

- The vertical lines on both sides of the distance reference lines can be used as reference lines for judging the parking space you need during reversing.
- The distance reference lines can be adjusted from time to time as the steering wheel is turned.

CCD



The CCD is installed next to the license plate lamp.

CAUTION

- Always keep the CCD surface clean. Clean the CCD surface with a piece of soft wet cloth to avoid scratching.
- Do not use a high-pressure cleaner to clean the CCD for a long time, and if this is necessary, please keep the nozzle at least 30cm away from the CCD.
- Do not cover the CCD.

⚠ WARNING

- **The CCD has blind spots, so it may not detect young children or small pets. It is important to pay special attention to the young children or small pets around the vehicle during reversing.**
- **The CCD may not be able to recognize the vertical objects at high position, such as wall flange.**

5.5.3 Around view monitor (AVM) *

The SVM, through real-time image, can provide the driver with information on the surrounding environment of the vehicle to reduce blind spots during driving. In addition, it can take the parameters such as steering wheel angle and vehicle dimensions into consideration to predict the vehicle's motion trajectory as well as superimpose the predicted track on the panoramic image to provide the driver with full information on the vehicle's direction of traveling, helping the driver to determine whether reversing is safe.

The AVM consists of four cameras, A/V system display screen and "Parking View" APP running on the A/V system. The SVM collects the images of left, right, front and rear of the vehicle and integrates them into a 360° bird's-eye view of the surrounding environment through image processing algorithm, which is displayed on the AV system.

On and Off

1. With the START/STOP button in the "ON" position, the AVM can be activated/deactivated via the shift lever:

- The AVM can be automatically turned on when the shift lever is set to the "R" position.
- When the shift lever is set out of the "R" position and the driver does not carry out any relevant operation, the instrument cluster indicates that system will be deactivated automatically after about 30s by default.

2. With the START/STOP button in the "ON" position, the AVM can be activated/deactivated by pressing the button:

- Click the icon in the menu bar of the A/V system to enter the application menu interface, click the "Parking View" soft key to enable the AVM; click the "Exit" soft key in the AVM interface to exit the AVM.
- Press the key on the console, so the key indicator lamp comes on and the AVM is turned on; press this key again, so the key indicator lamp goes out and the AVM exits.

3. The AVM can be activated/deactivated by pulling the "turn signal combination lever". When the START/STOP button is set to “ON” position:

- Pull the "turn signal combination lever" to the "left turn" or "right turn" position to turn on the AVM; pull the "turn signal combination lever" to the neutral position to make the AVM automatically exit.
- This function can be set to "on" or "off" through the "Settings" options on the AVM interface.

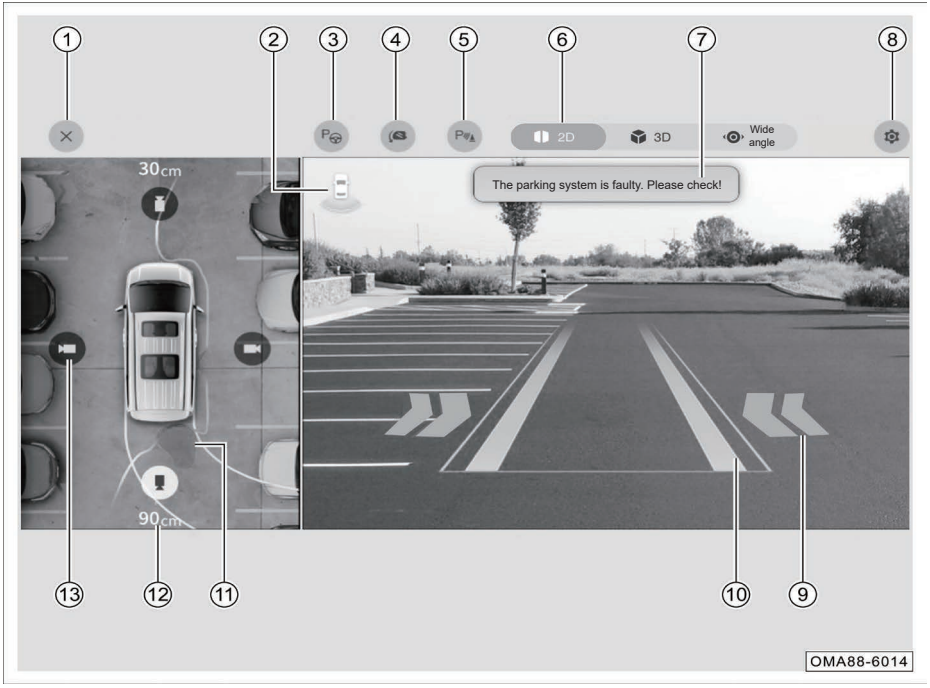
4. The AVM can be activated/deactivated automatically when "the radar sensors detect an obstacle". When the START/STOP button is set to “ON” position:

- When the radar sensors detect an obstacle, the AVM automatically turns on; when the detected obstacle disappears, the AVM automatically exits.
- This function can be set to "on" or "off" through the "Settings" options on the AVM interface.
- This function is only applicable to models with front radar configuration.

i NOTE

- When the AVM is turned on, the A/V system starts to display images taken around the vehicle, with some guide lines and radar prompts.
- If the vehicle speed is greater than 20 km/h during driving, the system will automatically be turned off.
- When the gearshift lever is not in "R" gear and the system activation time is longer than 30 s, the system will automatically be turned off (when the vehicle speed is zero).
- If not fully enabled, the AV system will not function normally.

Interface description



① Exit
② Current view direction
③ FAPA soft key*
④ Exterior rearview mirror tilt-down*
⑤ Radar audible alarm switch
⑥ 2D/3D/wide-angle view switching
⑦ Pop-up message window
⑧ Settings
⑨ RCTA
⑩ Trajectory
⑪ Radar sensing area
⑫ Radar distance
⑬ View switching soft key

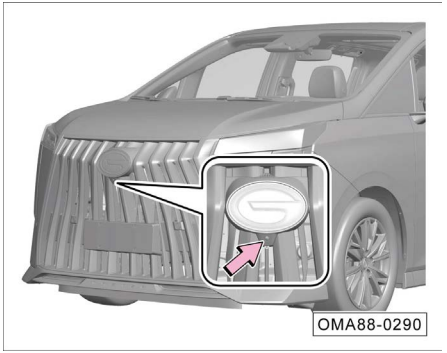
NOTE

- When the shift lever is in the "R" position, a single rear view is displayed in the image display area by default.
- When the shift lever is in a position other than "R", a single front view is displayed in the image display area by default.
- The “mirror tilt-down” button is only available when the gearshift lever is in the “R” position, and is automatically hidden when the gearshift lever is in other positions.
- The pop-up message window is displayed only when there is a message, and disappears at other times.

NOTE

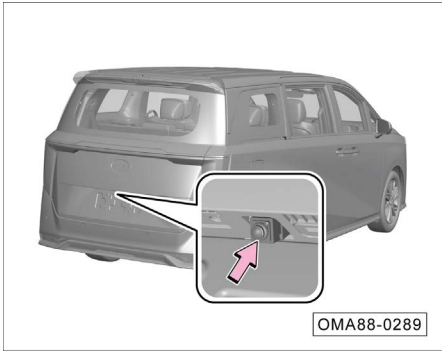
- When the left turn signal lamps are turned on, the image display area is switched to the single left view; when the right turn signal lamps are turned on, the image display area is switched to the single right view.
- In the 360° view interface, the view can be manually switched by the view switching soft key, and the corresponding view is displayed in the image display area.

Distribution of cameras



The front camera is installed under the logo on the front grille.

The left/right cameras are respectively installed on the left/right exterior rearview mirror.



CCD is installed next to the license plate lamp.

CAUTION

- Please keep the camera surface clean.
- Do not use a high-pressure cleaner to clean the camera for a long time, and if it to be used, please keep the nozzle at least 30 cm away from the camera.

5.5.4 Fusion automatic parking assist (FAPA)*

Through ultrasonic sensors and AVM cameras around the vehicle, the FAPA can automatically search for parking bays on the left/right side of the vehicle and detect vehicles, pedestrians and obstacles around the vehicle.

The FAPA can automatically plan and calculate the parking trajectory, and at the same time control the steering, vehicle speed, gear position, etc. of the vehicle to automatically park in or out of a parking bay.

⚠ WARNING

- **This system only provides driver assistance function, and cannot replace the driver for parking, so the driver shall still take full responsibility for safe driving.**
- **Ensure that this system is used without violating road traffic regulations.**
- **Please find a legal, suitable and safe parking bay while using the system.**

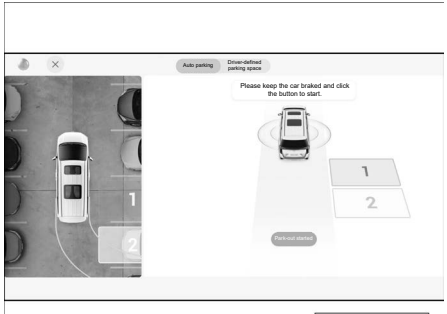
⚠ WARNING

- **This system may be not always able to detect the objects on the parking bay. Therefore, be sure to visually inspect that the parking bay is suitable and safe.**
- **This system may be not always able to detect vehicles, pedestrians and obstacles; for vehicles, pedestrians and other moving objects that break in suddenly, this system also has a risk of failure to brake timely. Therefore, during use of this system, the driver should always pay attention to the surrounding environment of the vehicle and be ready to take over the vehicle at any time to ensure safe driving.**

⚠ WARNING

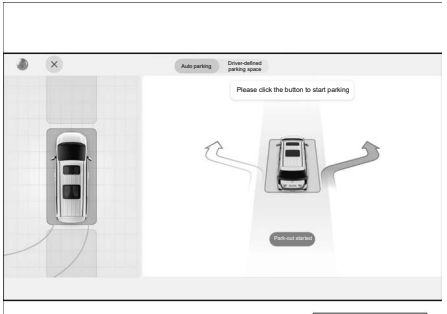
- **Only the front and rear of the vehicle are equipped with radars. The sides of the vehicle are detection blind spots. If an obstacle enters the side of the vehicle, this system cannot detect it, so the driver needs to actively observe it, and if there is a danger of collision, the driver needs to take over the vehicle in time.**
- **During use of this system, the driver should pay attention to the switching of vehicle movement trajectory to avoid collisions between the vehicle and pedestrians, etc.**

Automatic parking in



- This system has automatic parking in and automatic pulling out functions, whose activation is automatically judged by this system.
- When the automatic parking in function is activated, this system can automatically identify horizontal and vertical parking bays, but it may have a certain probability of false identification due to limitations.

Automatic pulling out



- The automatic pulling out function can only be activated when the vehicle is stationary in a horizontal parking bay, P gear is engaged and there is an obstacle or a vehicle within 1.2m ahead.
- When the automatic pulling out function is activated, the driver can select the pulling out direction by clicking the arrow on the touch screen or turning the turn signal lamp lever.

System limitations

FAPA may involve safety risk and fail to operate normally in some cases including but not limited to the following:

- Narrow parking bays.
- Existence of the following objects in the parking bay: objects that cannot reflect the ultrasonic sensor signal well, and objects that are not within the detection range of the ultrasonic sensor, such as columns, sharp and thin objects, strip/flake-like objects, suspended objects, ground locks and other low objects, etc.
- Large road slopes.
- Poor visibility (due to night, heavy rain, heavy snow, heavy fog, etc.).
- Low curb out of the detection range.
- One or more ultrasonic sensors or AVM cameras contaminated or blocked by obstacles (such as mud, ice and snow).
- Bad weather (such as heavy rain, snow, fog, incredibly high or low temperature) which cause interference with the operation of the ultrasonic sensors and AVM cameras.

- Sensors are affected by other electrical equipment or devices which can generate ultrasonic waves.
- Too high or low tire pressure.
- Failure to recognize the parking bay due to unclear parking bay lines or blurred contrast with the ground.
- Possible failure to recognize the parking bay due to too narrow vehicle passage.
- Wrong recognition due to a vehicle/other obstacle in a relatively far position in the parking bay.
- The vehicle cannot identify potholes.
- The vehicle is removed or modified irregularly.
- Use of tire chains or spare tires.
- Installation of towing eye.
- Load size exceeding vehicle size.
- Note: All the limitations are not described above.

CAUTION

- After parking starts, do not touch the steering wheel or gearshift lever, or the FAPA will be deactivated.
- When this system is activated, please carry out the parking operation according to prompts on the center console display.
- If the vehicle speed exceeds 20km/h, the system cannot search parking bays correctly.
- The FAPA cannot always search a parking bay or park the vehicle successfully. If no parking bay is searched or the parking is not successful, the FAPA can be re-activated to try parking.
- Due to the mechanical clearance, tire pressure difference and other factors affecting the control accuracy, there will be certain errors in the final position of each parking in/pulling out.

NOTE

Solutions in case of fault or interruption:

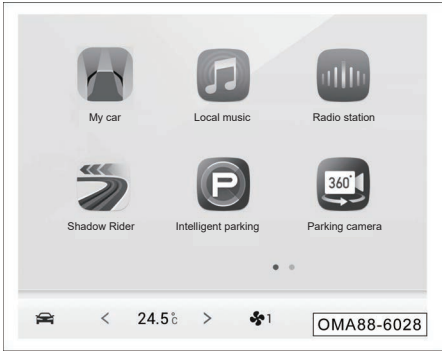
- After the vehicle is faulty or the function is interrupted, the FAPA can be re-activated under normal circumstances.
- In some cases, the vehicle must be shut down and restarted. If the FAPA fails to be re-activated after the vehicle is restarted and others systems cool down, please go to the GAC Motor authorized shop for inspection.

Activating FAPA

Method 1:

- After the vehicle is started, press the FAPA button on the console to activate the FAPA.

Method 2:

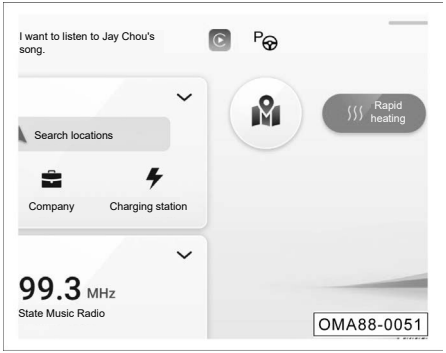


- After the vehicle is started, click the "Intelligent Parking" soft key in the application menu of the A/V system to activate the FAPA.

Method 3:

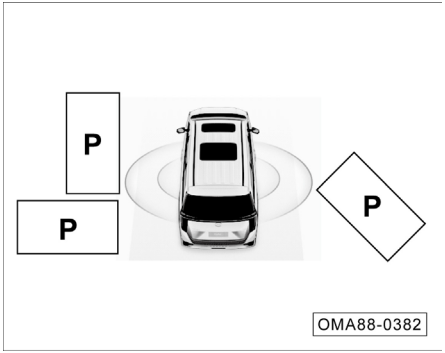
- After the vehicle is started, when the AVM is activated, click the icon in the AVM interface of AV system to activate the FAPA (after a parking bay is found in the background, this icon will flash and be highlighted).

Method 4:



- After the vehicle is started, when a parking bay is found in the background, the icon will be pushed in the status bar of the main interface of AV system. In this case, click the icon to activate the FAPA.

Searching for parking bay

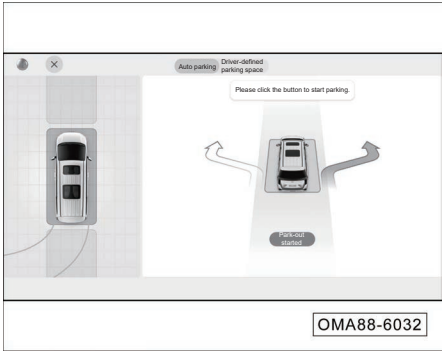


Please keep the vehicle side within 0.5m~2m from parking bays and maintain the vehicle speed not higher than 20km/h. In this case, the FAPA will automatically search for available parking bays.

The driver can also choose to activate the FAPA and then search for available parking bays according to the system prompts.

The FAPA can support the search for vertical, parallel and angled parking bays.

Selecting pulling out direction



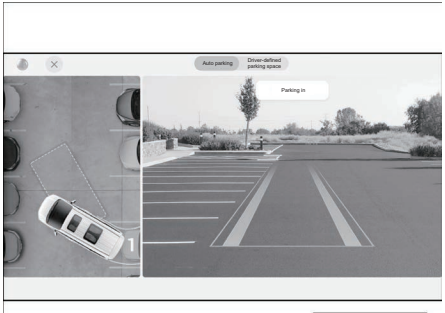
The automatic pulling out function can only be activated when the vehicle is stationary in a parallel parking bay and P gear is engaged.

When the automatic pulling out function is activated, the driver can select the pulling out direction by clicking the arrow in the FAPA interface or turning the turn signal lamp lever.

NOTE

- The FAPA has automatic parking in and automatic pulling out functions, whose activation is automatically judged by the FAPA.
- Due to system limitations, the FAPA cannot always search an available parking bay. If no parking bay is searched or an unavailable parking bay is searched, the FAPA can be re-activated for a second try.
- The length of a parallel parking bay required by the FAPA should be 6.5m or more; the width of a vertical parking bay required by the FAPA should be 3.2m or more.
- Keep the vehicle body 0.5~2m away from the parking bays while the system is searching for available parking bays.
- While the system is searching for available parking bays, try to keep the vehicle traveling direction parallel to the boundary lines of parking bays and keep driving straight.

Deactivating FAPA



- Click the soft key ① in the upper left corner of the FAPA interface of AV system to deactivate the FAPA.

Suspending FAPA

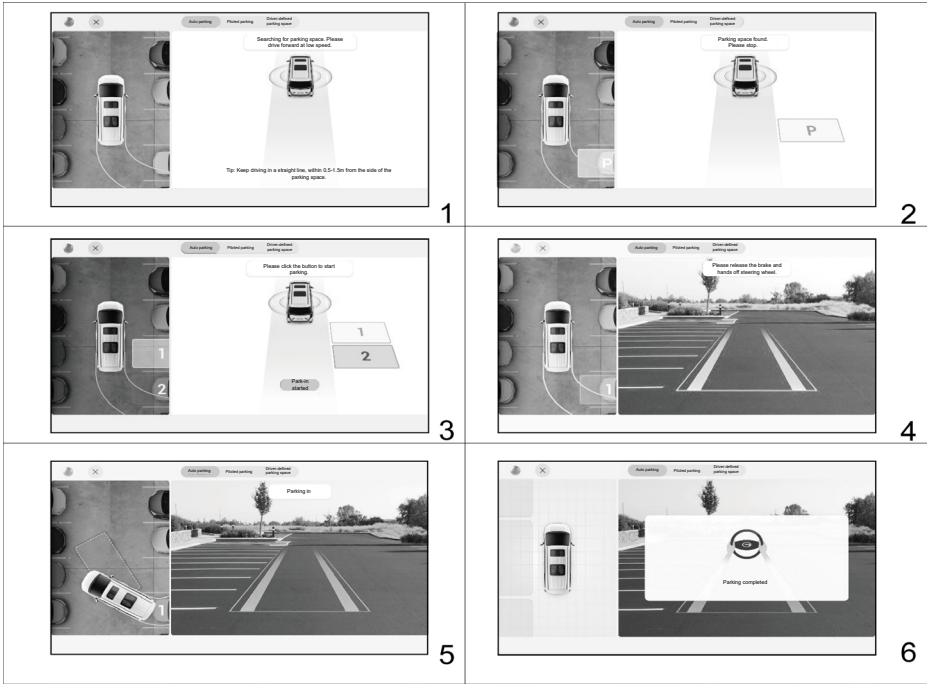
After the APA system is activated, parking can be suspended in any of the following ways, and continue when the suspension condition disappears.

- Press the button on the console to suspend the FAPA.
- Depress the brake pedal.
- Unfasten the driver's seat belt.
- Open any door.

Interruption cause

After being activated, the FAPA will be interrupted and deactivated in some cases including but not limited to the following. After being deactivated, the FAPA can be re-activated to try parking.

- The driver turns the steering wheel.
- The driver depresses the accelerator pedal.
- The driver operates the gearshift lever and presses the “P” position button.
- The driver operates the EPB button.
- The engine hood is open.
- Pause timeout occurs.
- The pauses during parking exceeds the specified limit.
- The times of parking movements exceeds the specified limit.
- The total parking duration exceeds the specified limit.
- The parking space is limited.
- The gradient of the ground where the vehicle is located is too large.
- The vehicle cannot move.
- TCS/ABS, etc. is activated.
- TCS is deactivated.
- The system is faulty.



Operation Instructions

Take the automatic parking in as an example:

1. After the vehicle is started, if the FAPA switch is pressed, the FAPA will automatically select the parking mode according to the current state of the vehicle.
2. Please follow the prompts to drive and search for a parking bay.
3. After parking bays are found, please park and follow the prompts to switch between different parking bays, then keep braking, and click "Start parking in" on the screen to activate the FAPA.
4. After parking is started, release the brake and steering wheel according to the prompts.
5. After releasing the brake pedal and steering wheel, please wait for the automatic parking success or manually deactivate the FAPA. During the activation, the driver should pay attention to the surrounding environment, and be ready to take over the vehicle at any time.
6. The parking is completed.

5.6 Electric power steering (EPS)

The EPS is a power steering system which directly uses the motor for providing torque. It is mainly composed of an integrated torque angle sensor(TAS), a motor, a retarding mechanism and an electronic control unit (ECU).

The EPS ECU controls the torque provided by the EPS motor in real time by detecting the torque applied by the driver, the vehicle speed, the engine speed and other status signals of the vehicle to augment the steering effort in the best way so as to ensure the easiness of steering at a low speed and the stability of steering at a high speed, and to improve the driving comfort and vehicle safety.

CAUTION

After the four-wheel alignment of the vehicle, the midpoint of the steering angle sensor will be affected, so it is necessary to recalibrate the midpoint of the EPS torque and angle sensor (TAS) and the difference between the left and right limit angles of the steering wheel is within 20°.

EPS indicator lamp

With the START/STOP button in “ON” position, the indicator lamp comes on, and goes out several seconds after the engine is started and the system completes the self-test, indicating that the EPS works normally.

If the indicator lamp does not go out after the engine is started or comes on during driving, it indicates that the EPS is faulty, and in the meanwhile, an alarm message indicating “Please check EPS” will be displayed on the instrument cluster display. In this case, it is required to park the vehicle in a safe place, and shut down and restart the engine. If the indicator lamp does not go out or comes on again during driving, stop driving, and contact the GAC Motor authorized shop for inspection.

Steering mode

There are three steering modes: Light, Comfort and Steady modes, where the hand force of the driver turning the steering wheel in Light mode will be small, in Comfort mode will be moderate, and in Steady mode will be large. The system is set to the Comfort mode by default. There are three ways to select the steering mode: ① Select “AVDC → Current Mode Setting → Turning Force Applied to Steering Wheel” in the application menu of the A/V system; ② If the D-MODE button is turned, the AV system will show the "Driving Mode" interface, and in this case, click "Current Mode Setting" to set the steering mode; ③ If the driving mode is switched, the system can automatically set the steering mode. => See page 163

CAUTION

Please select the steering mode when the vehicle keeping still and the steering wheel is released.

5.7 Driving skills

5.7.1 Pre-driving safety inspection

Routine inspection

- Check the tire for high/low pressure, cuts, bulges, damage or excessive wear.
- Check whether the wheel studs are missing or loose.
- Check whether the front & rear combination lamps and other lamps work properly; check the lighting direction of the front combination lamp.
- Check that the seat belt is not worn or damaged; check that the seat belt is fastened securely after fastening the seat belt.
- Check that the free travel of the pedal is sufficient.
- Check whether the levels of coolant, engine oil, brake fluid and windshield washer fluid are normal.
- Check the battery terminals for corrosion or looseness, and check the battery case for cracks or deformation caused by expansion.
- Check for leakage of fuel, engine oil, water or other fluids under the vehicle, and pay attention that water drip found after A/C operation is normal.

Inspections after starting/during driving

- Check whether the instrument cluster works properly; check whether any indicator lamp comes on or any alarm message is shown, etc.
- Check whether all controls (such as the lamplight combination, wiper combination and defrost switches) work properly.
- Check that the vehicle does not deviates to one side during braking on a road without safety risks.
- Check for other anomalies, such as part looseness, leakage and unusual noise.

5.7.2 Driving during running-in period

In order to prolong the service life of the vehicle, the vehicle shall be subject to running-in of certain mileage before it is brought into use. Please comply with the following rules in the running-in period:

- The mileage in the running-in period shall be 1500km.
- Choose roads in good condition and drive it at reduced load and limited speed.
- Do not start the engine with full throttle or drive with harsh acceleration.
- Avoid emergency braking in first 300 km.
- Strictly follow the operating procedures and make sure that the engine has reached normal operating temperature. Do not change the oil before regular maintenance.
- Carry out daily maintenance of the vehicle carefully; check and tighten the external bolts and nuts frequently; check the sound and temperature changes of the assemblies generated by operation and adjust them timely.

Engine running-in

The mileage in the running-in period of a new engine shall be 1500km. Within the first 1000km of driving:

- Keep the vehicle speed no more than 3/4 of the maximum allowable speed.
- Do not drive the vehicle with full throttle.
- Avoid running the engine at high speed.
- Do not tow any trailer.

Within 1000km - 1500km, it is allowed to increase the engine & vehicle speeds gradually to the maximum allowable range.

The internal frictional resistance of the engine at the beginning of running-in is much greater than that after running-in, and all the moving parts of the engine can have the best fitting after running-in.

After fully running in, both the service life and the fuel efficiency of the engine can be improved.

Running-in of tire and brake lining

Within the first 500km of driving, drive the vehicle at a moderate speed to get the new tires run in fully.

Within the first 200km-300km of driving, the brake linings have not reach the optimal friction condition, so please drive at a low speed and avoid emergency braking as much as possible.

⚠ WARNING

- **New tires and brake linings without running-in do not have the best adhesion and friction. Therefore, drive the vehicle cautiously within the first 500km to get the tires fully run in to prevent accidents.**
- **Newly replaced brake lining shall be run in according to the above requirements as well.**
- **During driving, keep an appropriate distance from other vehicles to prevent emergency braking, as the new tires and brake linings have not been fully run in at this time and if an emergency braking is applied, a traffic accident is likely to occur.**

⚠ WARNING

- **If the brake is damp, frozen or the vehicle runs on a salted road, the braking effect will be reduced.**
- **The brake shall be applied according to the road and traffic conditions. Do not step on the brake pedal unnecessarily to overheat the brake, resulting in too long braking distance and excessive brake wear.**
- **Do not coast the vehicle with the engine shut down. As the brake booster does not work, the braking distance will be greatly increased, which is liable to cause accidents.**

5.7.3 Driving essentials

Precautions under various road conditions:

- When the vehicle is driving on a road with crosswinds and gusts, please decelerate in advance and control the speed and steering wheel.
- Avoid driving on sharp-edged objects or other road obstacles, otherwise it may cause serious damage such as tire burst.
- Reduce the speed and drive at a low speed while driving on a bumpy or uneven road; otherwise the chassis may be scratched, which result in vehicle damage.
- When the vehicle is being driven downhill, decelerate in advance; avoid emergency braking, otherwise the brake system will overheat or be worn prematurely.
- When the vehicle is running on a slippery road, be careful during accelerating or braking; avoid sudden acceleration or emergency braking, otherwise it is likely to cause wheel slip.
- When the vehicle is running on an icy or snowy road, drive at a low and constant speed; avoid sudden acceleration or emergency braking and install tire chains for the wheels when necessary.

Precautions while driving over a water-logged road section:

1. Before driving over a water-logged road section, check the depth of water, which shall not be higher than the lower edge of the vehicle body.
2. Before driving through water, switch off the A/C before starting, decelerate and then gently depress the accelerator pedal without release to drive over the water-logged road section at a stable and low speed.
3. Do not stop the vehicle, reverse or shut down the engine in water.
4. After the vehicle is successfully driven through the water-logged road section, gently depress the brake pedal for several times to evaporate the moisture on the brake discs so as to restore the braking performance as soon as possible.

NOTE

The brake linings and brake discs are soaked in water while the vehicle is washed or driven over a road with deep water logging, and the braking effect will be greatly reduced; the braking distance will be longer than usual and the vehicle may be deviated to one side, and the parking brake cannot hold the vehicle still. In this case, it is recommended to drive the vehicle at a low speed and constantly depress the brake pedal slightly to remove residual moisture in the brake to recover the braking effect to the normal level. And then, normal driving can be resumed.

Driving essentials in winter

1. Check if the coolant is in good condition and if it has good anti-freeze effect as follows:

- Fill the cooling system with the coolant of the same type as the original one according to the ambient temperature.
- Adding coolant of non-specified grade may cause damage to the engine.

2. Check the battery and cables as follows:

- A low temperature in chilly days will reduce the capacity of battery, and therefore, fully charge the battery for start-up in winter.

3. Prevent the door lock from being frozen by ice and snow as follows:

- Spray some de-icer spray or glycerin into the door lock hole to prevent the door lock from being frozen.

4. Use washer fluids containing antifreeze:

- These products are available at GAC Motor authorized shop.
- The mix ratio of water to antifreeze shall comply with the manufacturer's instructions.

5. Avoid accumulated ice and snow beneath the mudguard:

- Accumulated ice and snow beneath the mudguard may result in difficult steering. Stop the vehicle regularly to check for accumulated ice or snow beneath the mudguard while driving the vehicle in severe cold winter.

6. It is recommended to bring some necessary emergency items according to the road conditions, such as:

- Tire chains, a window scraper, a bag of sand or salt, a flashing light, a plough staff, connecting cables, etc., which are recommended to be placed in the vehicle.

7. In cold winter (especially in northern China), avoid starting the engine frequently and shutting down the engine immediately after a short-time start. If the engine is often in an alternating heat & cold cycle, the condensed water is likely to form in the engine, and when the condensed water adheres to the engine oil, it may give an illusion of water-in-oil emulsion, and after the engine is restarted and warmed up, this illusion will be shattered; in addition, please change the oil regularly as required in the *Warranty Manual*.

8. For vehicles equipped with power sliding door, if the sliding door periphery and rear slide rail are frozen by ice and snow, it may result in electric opening failure. At this time, perform de-icing before using the power sliding door.

5.7.4 Efficient use of vehicle

- Before driving, make sure that the parking brake is completely released and the parking brake indicator lamp is off.
- Maintain sufficient tire pressure, as a too low tire pressure can cause premature tire wear and higher fuel consumption.
- Ensure that the wheel alignment is accurate. Otherwise it will cause premature tire wear, increased engine load and higher fuel consumption.
- Do not overload the vehicle, and unload unnecessary items from the vehicle, as excessive load will increase the engine load and the fuel consumption thereafter.
- Accelerate the vehicle slowly and smoothly to avoid rapid acceleration.
- Avoid roads with traffic jams as much as possible, as driving in traffic jam will increase the fuel consumption.
- Follow the instructions of traffic lights or maintain a safe distance with other vehicles while driving to avoid unnecessary stop or emergency braking, so as to save fuel and reduce wear on the brake system.
- When the vehicle is running, do not step on the brake pedal, as it will cause premature wear, overheating of the brake friction pad and wast of fuel.
- When driving, select good road surface. If driving on uneven roads, control the vehicle speed to avoid collision or scratches.
- If the chassis is stained with objects such as excessive dirt, clean them in time to reduce the vehicle's weight and prevent corrosion.
- Perform regular maintenance on the vehicle to maintain its optimal working condition, as dirty air cleaner, spark plugs, oil, and grease will reduce the engine performance and increase fuel consumption.
- When starting the engine at a low temperature, drive slowly for a few minutes, and ensure the engine is warmed up before acceleration.
- Do not open windows when driving at high speed.
- Properly use the A/C, etc.
- In case of parking for a long time, please shut down the engine to avoid wasting fuel due to long time idling of engine.

5.7.5 Fire prevention

In order to prevent vehicle fires, pay attention to the followings during use:

1. Never store flammables or explosives in the vehicle:

- In hot summer days, the inside temperature of vehicles parked in the sun can be as high as 70°C or more. If flammables or explosives such as lighters, cleaning agents and perfumes are stored in the vehicle, fire and even explosion will be likely to occur.
- Items with risk of fire such as lithium batteries or power banks left in the vehicle by passengers are also likely to cause fire.

2. Make sure the cigarette butts are completely extinguished after smoking:

- If the cigarette butts are not completely extinguished, fire may be caused.

3. It is recommended to regularly drive to the GAC Motor authorized shop for inspections:

- Also subject all electric lines of the vehicle to regular inspections. Specifically speaking, check whether the connectors, insulation, and fixing positions of electrical components and harnesses are normal, and handle any problems found during inspection in a timely manner.

4. Never modify the electrical circuits or install additional electrical components:

- Installation of additional electrical consumers (such as high-power audio device and xenon headlamps) will cause excessive load on the electrical line, causing overheating and even fire of harnesses.
- Never use fuses that exceed the rated specifications of the electrical consumer or other metal wires to replace the fuses.

5. Precautions for driving:

- During driving and parking, especially in summer, be sure to check if there are flammables such as hay, dry branches, leaves and wheat stalks under the vehicle, as they may be ignited by the components heated after long-time driving, such as engine exhaust pipe.
- Do not park the vehicle in places involving serious rat infestation, such as garbage dumps, and do not place items that attract rats, such as snacks in the vehicle, because rats will bite through the harnesses and a fire will be caused therefrom.

6. Always place a lightweight fire extinguisher in the vehicle, and know its operation method:

- In order to ensure the safety of the vehicle, place a fire extinguisher in the vehicle, and regularly check and replace it; at the same time, be familiar with the operation method of the fire extinguisher, so as to be prepared for handling any unexpected fire accident.

6.1 Maintenance instructions

Safety precautions

To avoid potential hazards, please read this section before work and confirm that you have the necessary tools and techniques.

- Make sure that the vehicle is parked on a level ground, shut down the engine and apply the parking brake.
- When cleaning parts and components, use the commercially available de-greaser or parts cleaner, instead of gasoline.
- Keep lit cigarettes, sparks, and open flames away from batteries and all fuel system related components.
- When working on batteries or with compressed air, wear goggles and protective clothing.

⚠ WARNING

Incorrect vehicle maintenance or driving the vehicle before the problem is solved may cause a traffic accident, resulting in serious injury or death.

Cautions for lifting the vehicle

- Before lifting the vehicle, ensure that the lift bracket (bracket size not more than 120*80mm) is located at the notch of the side apron (front/rear lifting point), to prevent the bracket from pressing against the side apron and the door exterior trim panel, causing damage to the side apron or the door exterior trim panel.

Potential hazards of the vehicle

- Carbon monoxide: carbon monoxide in the exhaust gas of the engine is toxic. Be sure to start the engine in a well-ventilated place.
- Burns: the engine and exhaust system are at high temperature during operation, which can easily cause burns. Therefore, wait till the engine and exhaust system cool down before touching the related parts and components.

CAUTION

This section lists some of important safety precautions. We cannot list all the dangers you may encounter during maintenance work.

6.2 Interior maintenance

Cleaning and maintenance of instruments and plastic parts

- Clean the surface of instruments and plastic parts with a clean soft cloth and clean water.
- If it cannot be cleaned, it is required to use a special solvent-free plastic cleaning agent for cleaning.

CAUTION

Solvent-based cleaning agents can damage plastic parts.

⚠ WARNING

It is forbidden to use cab sprays and solvent-based cleaning agents to clean the surface of the instrument panel and airbag assembly. Otherwise, it may loosen the surface and trigger the airbag, which may cause serious injury to occupants.

Cleaning and maintenance of carpet

- Vacuum the dust on the carpet frequently.
- Scrub the carpet regularly with detergent to keep it clean.

CAUTION

Please perform the cleaning in strict accordance with the operating instructions of cleaning agents.

⚠ WARNING

It is forbidden to add water to the foam cleaner. The carpet shall be kept as dry as possible.

Cleaning and maintenance of leather*

- Vacuum the dust.
- Clean the leather with a clean soft cloth and clean water.
- Wipe the leather dry with another dry soft cloth.
- If the cleaning methods described above are not enough to clean stains, please combine these methods with special leather cleaning soap or detergent.

CAUTION

If a leather stain remover is used, wipe it dry with a soft dry cloth as soon as possible.

⚠ WARNING

Never leave a soft cloth wet with leather stain remover on any part of the interiors for a long time. Avoid color fading or breakage of the resin or fiber of the interior fabrics.

Cleaning and maintenance of seat belts

- Pull the seat belt out slowly and keep it being extracted.
- Remove dirt from the seat belt by using a soft brush and neutral soapy water.
- After seat belts dry completely, retract the seat belts.

CAUTION

- Wait till the seat belts dry completely before retracting them. Otherwise, seat belt retractors may be damaged.
- Regularly check all the seat belts in the vehicle to ensure that the seat belts are clean and avoid hindering the normal operation of seat belts.

⚠ WARNING

- **If the seat belt webbing, connectors, retractor mechanism or buckles are damaged, please go to the GAC Motor authorized shop for replacement as soon as possible.**
- **For the overhaul of an accident vehicle, seat belts must be replaced, no matter whether they are damaged or intact.**
- **Avoid foreign objects or liquids entering the seat belt buckles, which may result in the buckles and seat belts not working properly.**
- **Under any circumstances, it is forbidden to remove or modify seat belts without authorization.**
- **It is forbidden to use chemical cleaning agents to clean the seat belts, for fear of damaging the seat belt webbing and impairing the function of seat belt.**

Cleaning and replacement of filters

The vehicle is equipped with an air cleaner, an A/C filter, an oil filter, a fuel filter, etc. They aim to filter gases or fluids. If they are too dirty or clogged, the normal operation of corresponding systems will be affected. Therefore, it is recommended to regularly clean or replace the filters at the GAC Motor authorized shop according to the provisions of the *Warranty Manual*.

6.3 Exterior maintenance

Vehicle washing

Washing the vehicle frequently helps to protect its appearance.

Vehicle washing shall be performed in a cool place, rather than under direct sunlight. If the vehicle is left in the sun for a long time, wait till the vehicle body surface cools down before washing the vehicle.

When using an automatic vehicle washer, be sure to follow the instructions of the operator of the automatic vehicle washer.

⚠ WARNING

The START/STOP button must be set to "OFF" position before vehicle washing.

CAUTION

The paint surface of the vehicle body is strong enough to withstand the washing of the automatic vehicle washer. However, it is important to pay attention to the effects on the paint surface. The structure of the automatic vehicle washer, the cleaning agent, the filtering state of the clean water, and the type of wax solvent that do not meet the requirements may cause damage to the paint surface.

Manual vehicle washing

- Rinse the vehicle with plenty of water to remove floating dust.
- Prepare a bucket of water and add a special cleaning agent for vehicle washing to it.
- Gently scrub the vehicle with a soft cloth, sponge or soft brush and rinse it several times from top to bottom.
- Rinse the parts such as wheels and door sills at last. Replace sponges or soft cloth while washing the vehicle.
- After scrubbing, rinse the vehicle thoroughly with plenty of water.
- After washing, carefully dry the paint surface of the vehicle using a soft towel or antelope skin.

CAUTION

When the body has dirt such as asphalt, it needs to be cleaned with special detergent, and then washed with clean water to avoid damaging the surface finish of the body. Check the body for paint peeling and scratches while wiping the body. If any, drive to the GAC Motor authorized shop for touch-up.

When using a steam cleaner or a high-pressure cleaner to wash the vehicle, be sure to be very careful. Be sure to wash the vehicle in accordance with the operating instructions and requirements of the steam cleaner or high-pressure cleaner. Pay attention to the working pressure, temperature and spraying distance:

- When using a steam cleaner or a high-pressure cleaner to wash the vehicle, keep a sufficient water spray distance from the vehicle, and ensure the temperature does not exceed 60°C.
- If the vehicle is equipped with a power sunroof, keep the water spray distance more than 80 cm when washing the vehicle. If the high-pressure cleaner is close to the vehicle, or if excessive pressure or temperature is used, the vehicle may be damaged.
- Do not wash a radar sensor or a parking assist camera with a high-pressure cleaner for a long time; when washing the radar sensor or parking assist cameras, keep the water spray distance more than 30 cm.

WARNING

- **When washing the vehicle manually, pay attention to personal safety and beware of angular parts at the bottom of the vehicle to avoid being scratched.**
- **When washing the vehicle, pay special attention to the bottom of the vehicle and the inner side of wheelhouses. Do not hurt hands and arms with sharp parts.**
- **Never spray water directly into the engine compartment when washing the vehicle. Otherwise, it will affect the service life of various parts and components in the engine compartment.**

Waxing

Regular waxing can protect the paint surface of the vehicle body and keep the vehicle body clean. In order to effectively protect the paint surface of the vehicle body, it is recommended to apply high-quality hard wax once a year to protect the paint surface against corrosion by external bad environments and to resist light mechanical scratch.

Be sure to wipe the appearance of the vehicle dry before waxing. Before waxing the vehicle, please select a high-quality wax protectant. High-quality wax protectant generally falls into the following two types:

- Vehicle body wax: a wax used to protect the paint surface against damage by external bad environments such as sun exposure and air pollution. This type of wax is generally used for new vehicles.
- Polishing wax: a wax which can restore the gloss of the paint surface that has been oxidized or tarnished. This type of wax is generally used to restore the gloss of paint surface.

Cleaning and maintenance of external plastic parts

External plastic parts are generally washed with clean water, soft cloth and soft brushes. If they cannot be cleaned, please use the special solvent-free plastics cleaner approved by our company.

CAUTION

Do not use solvent-based cleaning agents when washing plastic parts. Otherwise, it is easy to damage the plastic parts.

Washing of window glasses and rearview mirrors

Clean the window glasses and rearview mirrors with alcohol-based glass cleaner, and then wipe the glass surface dry with a clean, lint-free soft cloth or antelope skin.

After curing the surface of the vehicle body, remove the wax residue on the glasses with a special cleaning agent and cleaning cloth. Avoid scratching the wiper blades.

Remove snow from the windows and rearview mirrors using a small brush.

Remove accumulated ice using de-icer spray. Ice removal shovel can also be used, but special care should be taken to avoid damaging parts, and ice must be scraped in the same direction during the use.

CAUTION

- It is forbidden to scrape the surface back and forth during ice removal.
- It is forbidden to remove ice and snow from the windshields and rearview mirrors using warm water or hot water. Otherwise, the windshields may burst.
- If there are residual objects such as rubber, grease and silicone on the glass, they must be removed with a special window cleaner or silicone cleaner.

Cleaning and maintenance of wiper cover

Try to avoid parking the vehicle under a tree frequently/for a long time. In case of leaves or other debris on the surface of the wiper cover, please clean them in time.

Cleaning of wiper blades

- Activate the wiper maintenance mode, raise the wiper arm and carefully wipe off the dust and dirt on the wiper blade with a soft cloth.
- After cleaning, gently lower the wiper arm back to the windshield.

CAUTION

- Be careful when lowering the wiper arm to prevent it from falling and hitting the windshield instantly.
- The wiper blades are coated with a layer of graphite which makes the wiping operation smooth and does not produce scraping noise. Solvent-based cleaning agents, hard sponges and sharp objects can damage the graphite layer. Damaged graphite layer will increase the wiping noise of the wiper, and the wiper shall be replaced in time.
- In winter or cold conditions, be sure to check whether the wiper blade is frozen together with the windshield before using the wiper. If so, perform de-icing first. Otherwise, the wiper blade and wiper motor will be damaged.

Maintenance of sealing strips

Frequent and proper protection of the rubber sealing strips of the doors, windows and other parts of the vehicle is intended to maintain their flexibility and prolong their service life. Such protection can also improve the tightness, make the door easy to open, reduce the impact sound of closing the door, and prevent freezing in winter.

When performing maintenance on sealing strips, remove dust and dirt from surfaces using a soft cloth. Apply special protective agent to rubber sealing strips regularly.

Cleaning and maintenance of wheels

Regularly remove anti-skid salts on the wheels and debris on the brake linings, which can keep the wheels aesthetic, maintain the surface smooth and prolong the service life of wheels. It is recommended to perform the following operations regularly:

- Remove anti-skid salts on the wheels and debris on the brake linings using acid-free wheel cleaner every two weeks.
- Apply high-quality hard wax to the alloy wheels every three months.

CAUTION

- It is prohibited to maintain the wheel surface with vehicle polish or other abrasives.
- The wheels with damaged protective coating on surface must be repaired in time.
- Using a high-pressure cleaner may cause permanent visible or invisible damage to the wheels, resulting in serious injury or death.
- It is forbidden to use cluster head nozzles to spray the tires. Otherwise the tires will be damaged, causing traffic accidents.

6.4 Inspecting and adding fluids

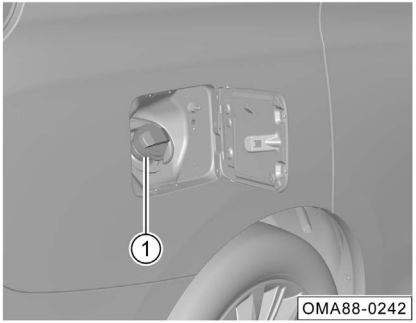
6.4.1 Fuel

As the amount of fuel decreases when the vehicle is running, the fuel gauge scale will gradually decrease. => See page 47

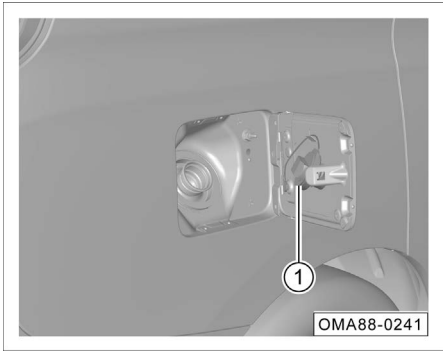
When the fuel level is too low, the yellow indicator lamp flashes, and the instrument cluster will give an alarm message. At this time, fuel shall be added as soon as possible.

Adding fuel

- Pull the fuel filler flap release handle under the driver's instrument panel as arrowed, after which the fuel tank cap will pop up.



- Open the fuel tank cap completely, and slowly unscrew the fuel filler cap ① counterclockwise. Keep the fuel filler cap at the original place for a while before it is unscrewed completely to allow fuel tank to release the fuel vapor inside, and then remove the fuel filler cap ①.



- Suspend the fuel filler cap ① tether on the inner hook of the fuel tank cap and start adding fuel.
- After adding the fuel, tighten the fuel filler cap ① clockwise until a "click" sound is heard, indicating that the fuel filler cap has been tightened.

NOTE

Grade of fuel: The octane number, please refer to the fuel label on the fuel filling cap.

NOTE

This model complies with China VI emission standards. The fuel supply system of China VI is designed with a closed fuel and gas recovery system. During refueling, the fuel gun switch may be triggered due to high ambient temperature or high fuel flow rate, and the fuel gun is switched off when the fuel tank is not filled fully. This is a normal phenomenon. At this time, the refueling speed shall be slowed down.

CAUTION

- Low-grade fuel or substandard fuel may damage the engine or make the engine fail to meet performance requirements.
- When the fuel level is below 1/4, please refuel in time to avoid the vehicle breaking down due to insufficient fuel supply on slopes.

CAUTION

During refueling, insert the fuel gun into the deepest part of fuel filler pipe. When the fuel gun is switched off for the first time, it is recommended not to continue refueling to avoid fuel spillage caused by excessive refueling.

WARNING

- **At any time, be sure to shut down the engine when refueling, and pay attention to open flames and fire.**
- **Please avoid contact of fuel with skin or clothing.**
- **Please refuel the vehicle according to the vehicle fuel grade. If fuel not complying with the regulations is added accidentally, do not start the engine. Please contact the GAC Motor authorized shop immediately for treatment.**

6.4.2 Engine oil

Function of engine oil

Engine oil has functions such as lubrication, sealing, cooling, anti-rusting and cleaning.

Specifications of engine oil

The engine has been filled with high-quality engine oil, which can be used in the year-round climate except for extreme cold weather before delivery.

When purchasing engine oil, please check whether the specifications indicated on the outer packaging of the engine oil are suitable for the engine of this vehicle.

i NOTE

Oil grade:

- API SN/ILSAC GF-5.

Oil viscosity:

- SN 5W-30.

⚠ WARNING

Always use the engine oil approved by our company. Otherwise, the ensuing engine damage will not be covered by the warranty.

i NOTE

- Be sure to go to the GAC Motor authorized shop to change the engine oil according to the period specified in the *Warranty Manual*.
- If the vehicle is running under severe conditions, fuel with high sulfur content is used, engine idles for a long time (e.g., a taxi), the vehicle is driven in a high-dust area, the vehicle often tows a trailer, or the vehicle is used in an alpine area, the maintenance cycle shall be shortened and the maintenance times shall be increased.

Low oil pressure warning lamp

When driving, if the warning lamp comes on, be sure to stop the vehicle in a safe place and shut down the engine. After the engine cools down, check the oil level.

If the engine oil level is normal, but the warning lamp is still on after the engine is started, do not continue to start the engine. In this case, contact the GAC Motor authorized shop timely for inspection.

⚠ WARNING

- **Ignoring the warning lamps and related warning instructions may damage the engine.**
- **The low oil pressure warning lamp can not indicate the oil level, and the oil level must be checked regularly.**

Inspecting the oil level

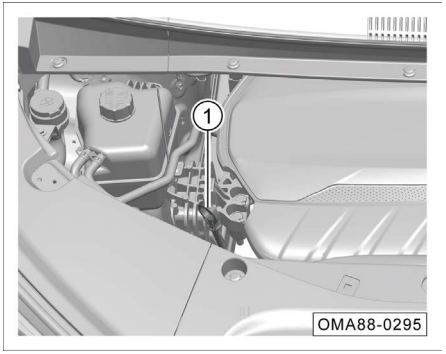
Be sure to check the oil level regularly. Park the vehicle on a level ground, apply the park brake, and shut down the engine. After the engine cools down, open the engine hood and check the oil level.

⚠ WARNING

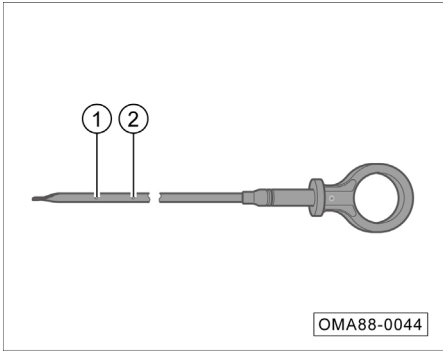
- **Be extremely careful while working in the engine compartment.**
- **The engine compartment is a high-risk area. Be sure to read and follow the relevant warning instructions carefully before opening the engine hood.**

i NOTE

While checking the oil level, ensure the engine is cold.

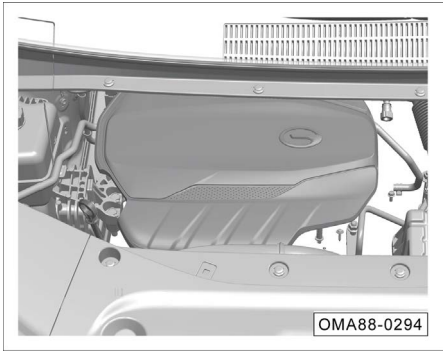


- Pull out the oil dipstick ①.



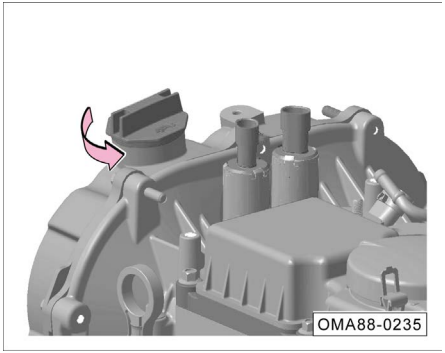
- Wipe off the oil stains on the dipstick using a clean cloth, and then insert the oil dipstick to the end.
- Pull out the dipstick again and read the measured oil level, which shall be between the minimum scale mark ① and the maximum scale mark ②.
- If there is too little engine oil, please add engine oil in time. Otherwise, poor lubrication will damage the engine.

Adding engine oil



After checking the oil level, if required, add engine oil following the steps below:

- Lift up to remove the engine upper guard plate.



- Unscrew the oil filler cap counterclockwise.
- Add small amounts of engine oil repeatedly, and check the oil level after each filling.
- When the oil level is close to the maximum scale mark ②, indicating the engine oil is sufficient, stop adding oil, refit the oil filler cap and tighten it clockwise.

⚠ WARNING

- **Be careful while adding the engine oil. Do not spill it. If the engine oil gets on skin, be sure to rinse the skin thoroughly.**
- **If too much oil is added, do not start the engine. In this case, please contact the GAC Motor authorized shop as soon as possible. Otherwise, the three-way catalytic converter may be damaged.**
- **After filling, be sure to tighten the oil filler cap to prevent the engine oil from splashing when the engine is being started, for fear of a fire.**
- **Since engine oil is toxic, it shall be stored in the original container and kept out of children's contact to avoid poisoning due to accidental ingestion.**
- **Do not add any lubricants to the engine oil. Otherwise, the engine will be damaged. Engine failure caused by adding lubricants is not covered by the warranty.**

6.4.3 Coolant

Function of coolant

Coolant has functions such as cooling, anti-freezing and anti-corrosion.

Specifications of coolant

When the vehicle leaves the factory, the cooling system has been filled with coolant, which can be used in the year-round climate except for extreme cold weather.

NOTE

Specifications of coolant: DF-6, -35 °C.

NOTE

- Be sure to go to the GAC Motor authorized shop to change the coolant according to the period specified in the *Warranty Manual*.
- If the coolant discolors, the maintenance cycle shall be shortened and the coolant shall be changed at the GAC Motor authorized shop.

High engine coolant temperature indicator lamp

If the coolant temperature is too high, the indicator lamp on the instrument cluster comes on in red, and an alarm message is given to prompt the driver; at this time, the vehicle must be stopped in a safe place and the engine shut down. After the engine cools down, check the coolant level.

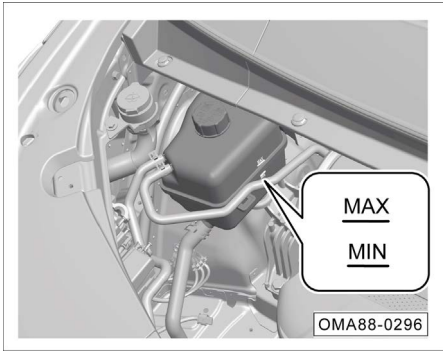
If the coolant level is normal but the indicator lamp is still on after the engine is started, do not continue to start the engine. In this case, contact the GAC Motor authorized shop timely for inspection.

Inspecting the coolant level

Be sure to check the coolant level regularly. Park the vehicle on a level ground, apply the parking brake, and shut down the engine. After the engine cools down, open the engine hood and then check the coolant level.

WARNING

- **The engine compartment is a high-risk area. Be sure to read and follow the relevant warning instructions carefully before opening the engine hood.**
- **If steam or coolant flows out from the engine compartment, do not open the engine hood, for fear of burns; wait till there is no steam or coolant overflowing and the engine cools down before opening the engine hood.**



Check whether the coolant level in the expansion tank is between the maximum scale mark "MAX" and the minimum scale mark "MIN".

NOTE

When the engine is not cooled, the coolant level will be high, and there will be errors in checking the coolant level.

CAUTION

When the coolant level is below the minimum scale mark "MIN", coolant must be added. Insufficient coolant will affect the cooling effect and cause engine damage.

Adding coolant

After checking the coolant level, if required, add coolant following the steps below:

- Wrap the expansion tank cap with a thick cloth and unscrew it counterclockwise.
- Add coolant to a level between the maximum scale mark “MAX” and the minimum scale mark “MIN”.
- Turn the expansion tank cap clockwise to the locking point.

CAUTION

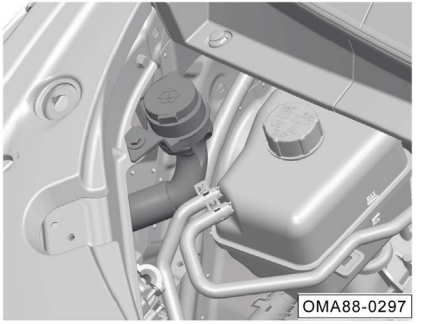
- When the engine is not cooled, the cooling system is under high pressure. In this case, do not open the expansion tank cap, otherwise the emerging coolant will cause scald.
- Coolant can only be added after the engine has cooled down. The coolant level after filling must not exceed the maximum scale mark "MAX". Otherwise, when the engine is started and the cooling system is under high pressure, coolant will overflow.
- Only fresh coolant is allowed to be added.

WARNING

- **It is forbidden to mix coolant that is not approved by our company in the original coolant.**
- **In case of emergency, if other coolant is used or pure water is added, go to the GAC Motor authorized shop to clean the cooling system and change the coolant in time.**
- **If the too much coolant is consumed or it is consumed too fast, there may be a leak in the cooling system. In this case, please go to the GAC Motor authorized shop for inspection in time.**
- **Coolant must be contained in the original container, and kept out of children's contact to avoid poisoning due to accidental ingestion.**

6.4.4 Windshield washer fluid and wiper blades

Adding windshield washer fluid



If the level of the washer fluid is too low, the washer fluid shall be added in time.

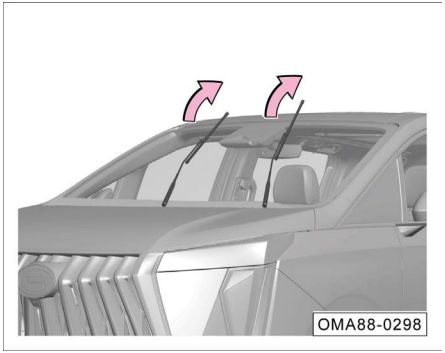
CAUTION

Do not mix and use the windshield washer fluid with other cleaning liquids. Otherwise, the washer fluid will decompose and block the nozzle of the windshield washer.

⚠ WARNING

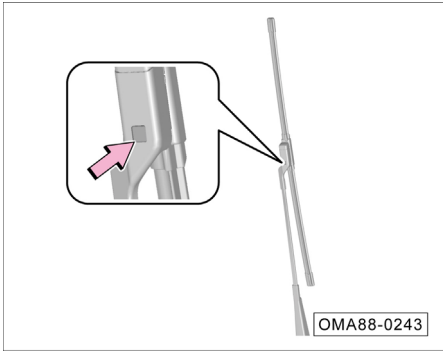
- **Be extremely careful while working in the engine compartment. Before operation, be sure to carefully read and follow the relevant warning instructions.**
- **Do not misuse coolant or any other additives as windshield washer fluid. Otherwise, oil stains will be left on the windshield during cleaning of the windshield, which will affect the visibility and easily cause accidents.**
- **It is forbidden to use windshield washer fluid with ethanol content exceeding 10%. In high temperature environment, this type of windshield washer fluid will have corrosive effect on lamps and lead to cracking of lamps. It is recommended to use methanol washing solution.**

Replacing front windshield wiper blades



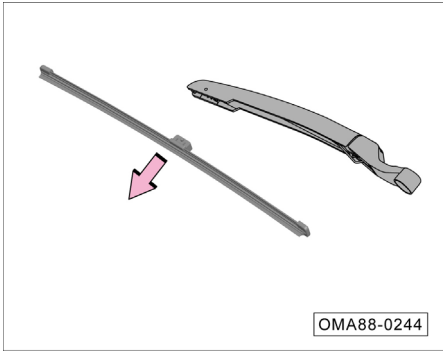
There are two ways to enter the wiper maintenance mode:

- Method 1: Within about 10 s after the START/STOP button is turned to “OFF” position, if the wiper column switch is turned to “MIST” position and then quickly returns to the original position, the front wiper will run to the highest position and then stop.
- Method 2: With the START/STOP button in “ON” position, you can activate the wiper maintenance mode via the Settings interface on AV system display.



- Lift up the wiper arm, and press the lock button on the wiper arm as arrowed to remove the wiper blade.
- Install the new wiper blade into the wiper arm in reverse steps. It is installed in place when a “click” is heard.
- Gently put the wiper arm back into the windshield.
- Set the START/STOP button to the "ON" position to let the wiper arm automatically return in place.

Replacing rear windshield wiper blades



- Within 10 s after the ENGINE START/STOP button is turned to “OFF” position, if the rear wiper knob is turned to “ON” position to turn on the rear wiper and then quickly returns to the original position, the rear wiper will run to the highest position and then stop.
- Lift the wiper arm, and press the wiper blade as arrowed to remove the wiper blade.
- Install the new wiper blade into the wiper arm in reverse steps. It is installed in place when a “click” is heard.
- Gently put the wiper arm back into the windshield.
- Set the START/STOP button to the "ON" position to let the wiper arm automatically return in place.

If replacing wiper blades is required, it is recommended to go to the GAC Motor authorized shop for replacement.

CAUTION

- When lifting the wiper arm, please grasp the wiper arm with hands, rather than grasp the soft wiper blade.
- New wiper blades with the same length and specifications as the previous ones must be used.
- Be careful while lowering the wiper arm to prevent it from falling and hitting the windshield instantly.
- The status of the wiper blades must be checked regularly, and the wiper blades must be replaced as specified. Damaged wiper blades must be replaced in time.
- Excessively worn or dirty wiper blades are very easy to scratch the windshield and will affect the field of vision when used, reducing driving safety.

6.4.5 Brake fluid

Function of brake fluid

Brake fluid is used to transmit power in the hydraulic brake system of the vehicle.

The brake fluid is water-absorbent, so it can continuously absorb moisture in the surrounding air during use. If the brake fluid stays in the system for too long and absorbs too much moisture, air resistance will generate in the system pipeline during braking, reducing the braking effect and impairing driving safety; it may even cause the complete failure of the brake system, resulting in accidents. Therefore, be sure to go to the GAC Motor authorized shop to check the brake fluid level or change the brake fluid according to the period specified in the *Warranty Manual*.

NOTE

Specifications of brake fluid: DOT4.

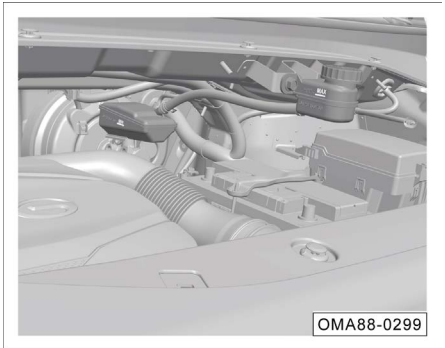
⚠ WARNING

- **The use of waste brake fluid or brake fluid that does not apply to this vehicle will greatly reduce the braking effect and even lead to brake system failure! The company does not assume any responsibility (including quality guarantee) for vehicle failures and damage caused thereby.**
- **Brake fluid in use must meet the criteria and be fresh.**

Brake system indicator lamp

When the vehicle is running, if the indicator lamp (!) comes on in red, the level of brake fluid in the brake fluid reservoir may be too low. In this case, be sure to immediately stop the vehicle at a safe place and check whether the brake fluid level is normal.

Inspecting brake fluid level



When the engine cools down, check whether the brake fluid level is between the maximum scale mark “MAX” and the minimum scale mark “MIN”.

During vehicle use, the brake fluid level will slightly drop due to the worn brake linings and automatic adjustment

If the brake fluid level drops significantly in a short period of time or drops below "MIN", it indicates that the brake system may leak.

i NOTE

- **After check of the brake fluid level, if the fluid level is below "MIN", brake fluid must be added.**
- **If the brake system warning lamp does not go out or comes on again after the brake fluid is added, there may be a leak in the brake system, causing the brake fluid level to drop quickly, or the brake system malfunctions. In this case, do not continue to drive and contact the GAC Motor authorized shop in time for inspection.**

Adding brake fluid

In order to ensure the normal operation of the brake system, the added brake fluid shall meet the specifications:

- Open the brake fluid reservoir cap counterclockwise.
- Add fresh brake fluid to the maximum scale mark “MAX” and stop adding.
- Tighten the brake fluid reservoir cap clockwise.

CAUTION

- The brake fluid will corrode the paint surface of the vehicle body. Brake fluid splashed on the paint surface shall be wiped off in time.
- Using waste brake fluid or using brake fluid not applicable to the vehicle will remarkably reduce the braking effect due to incompatibility and even cause the brake system to fail.

⚠ WARNING

- **Brake fluid is toxic. It must be contained in the original sealed container, placed in a safe place, and kept out of children's contact to avoid poisoning due to accidental ingestion.**
- **Brake fluid must be stored in accordance with environmental protection laws.**

6.4.6 Battery

Warning symbols and instructions for battery operation

	Goggles must be worn during operation!
	The battery electrolyte is highly corrosive. Protective gloves and goggles must be worn during operation!
	Open flames, sparks, uncovered lamps and smoking are prohibited in the workplace!
	Very explosive gas mixture is generated when the battery is being charged!
	Children must stay away from electrolytes and vehicle batteries!

If not familiar with the operation process or without special tools, never carry out any operations on the electrical system of the vehicle. The relevant operations shall be carried out by the GAC Motor authorized shop.

Charging system warning lamp

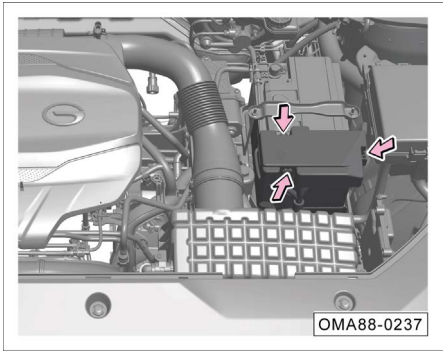
The warning lamp is used to indicate alternator failure.

This warning lamp will come on when the engine is not started with the START/STOP button set to "ON" position, and will go out after the engine is started.

When the vehicle is running, if the warning lamp comes on, it indicates that the alternator is no longer charging the battery. In this case, please go to the GAC Motor authorized shop for inspection as soon as possible.

Inspecting the battery

The battery must be checked according to the period specified in the *Warranty Manual*.



- Open the engine hood, and press the fixing clip as arrowed to remove the cover of the battery positive terminal.
- Check the connection of the battery connector and the cable for corrosion or looseness; check the appearance of the battery for cracks, swelling, etc. If the phenomena above are found, please go to the GAC Motor authorized shop for inspection in time.
- If the vehicle is not in use for a long period of time, check the battery condition frequently.

NOTE

- If the battery is low in power or damaged, making the engine difficult to start, please contact the GAC Motor authorized shop to charge or replace the battery.
- If it is required to replace the battery, please go to the GAC Motor authorized shop for replacement; if a wrong type of battery is used, the vehicle may not run due to incompatibility or the electrical system may fail.

Instructions for using the battery

After the engine is turned off, the battery will quickly discharge when an electrical consumer on the vehicle is being used:

1. Do not use an electrical consumer on the vehicle for a long time after the engine is turned off.
2. While leaving the vehicle, make sure that the doors are closed and all electrical consumers (e.g., lamps) are turned off.

CAUTION

- If the engine can not be started due to depleted battery, please try emergency start. If the engine still can not be started, please contact the GAC Motor authorized shop for overhaul.
- To avoid damage to the electrical system of the vehicle, never connect power generation equipment such as solar panels or vehicle battery chargers to a 12V power outlet.
- The battery contains toxic substances such as sulfuric acid and lead, so it must be disposed of properly and must not be treated as ordinary household waste.

6.5 A/C filter

Inspecting and cleaning the A/C filter

Check or clean the A/C filter regularly according to the provisions in the *Warranty Manual*. If the vehicle is running in harsh conditions and the A/C filter gets too dirty, it is recommended to replace the A/C filter at an interval shorter than that specified.

The A/C filter is located inside the front passenger's glove box. When removing the A/C filter, it is more complicated to disassemble the parts. In order to avoid unnecessary component damage, it is recommended to check and clean or replace the A/C filter at the GAC Motor authorized shop.

6.6 Replacing bulb

Instructions for replacing bulbs

All vehicle lamps are LED lamps, which cannot be disassembled or replaced individually. If the bulb is damaged or malfunctions, please go to the GAC Motor authorized shop for inspection in time.

⚠ WARNING

It is forbidden to modify external lighting devices and tell-tales.

6.7 Wheels

⚠ WARNING

- **Within the first 500km, the road adhesion of new tires is unlikely to reach the best condition. Therefore, the vehicle shall be driven carefully at a moderate speed to prevent accidents.**
- **Inadequate road adhesion of tires not subject to running-in period or excessively worn can directly affect the braking effect.**
- **If it is found that the vehicle is abnormally vibrating or deviating, stop the vehicle immediately and check whether the tires are damaged.**
- **If it is found that the tires are unevenly and excessively worn, please go to the GAC Motor authorized shop for inspection as soon as possible.**

⚠ WARNING

- **If tires burst or leak when the vehicle is running, it is very easy to cause serious traffic accidents.**
- **Never use damaged tires and wheels, or use tires of which the treads have been worn to the wear indicators. Otherwise, it is very easy to cause an accident, because such tires may burst during driving, causing traffic accidents and injury. Such tires and wheels shall be replaced in time.**
- **The tire pressure must meet the regulations. Otherwise, it may cause an accident. If the tire pressure is insufficient, the continuous high-speed running of the vehicle will cause the tire to deflect, and the tire is extremely easy to overheat, which may cause tread separation or tire burst.**
- **Be careful not to expose the tires to chemicals, oil, grease, fuel and brake fluid.**

⚠ WARNING

- **Never use old wheels and tires of unknown origin under any circumstances. Although such wheels and tires do not have visible damage, they may have been damaged. During driving, they may cause the vehicle to lose control and lead to traffic accidents.**
- **It is not recommended to use recycled tires. For such tires, the carcass may degrade as the service time passes, and the durability may also be restrained, impairing the driving safety.**

Precautions for wheel failure

- When driving over curbs or similar obstacles,
- Be careful not to let the tires contact with grease, oil and fuel
- Regularly check the damage status of tires (i.e., splitting, abrasion, shedding, deformation or bulging).
- Regularly remove debris embedded in the grooves of the tire pattern.

Instructions for storing tires

- Before removing the tire, make a mark on the tire to indicate the rotation direction of the tire. Refit the tire according to the mark to ensure the rotation direction and the dynamic balance of the wheel are unchanged.
- Store the removed wheels or tires in a cool, dry place, and preferably in a dark place.
- The tire mounted on the rim must not be stored upright.

New tires and wheels

- Select the new tire and wheel carefully, and make sure that the dimensions, load range, rated speed and structure type of new tire are the same as those of original one.
- Replace at least two tires on the same axle at the same time, rather than only one tire individually.
- Do not use tires of different dimensions or types, and do not mix summer tires, all-season tires and winter tires in use.
- After each wheel installation, check whether the wheel bolts are tightened to specified torque (125±10N•m).

Summer tires

Summer is a rainy season. The tire tread depth directly affects the driving safety in rainy days. In summer, when the tire tread depth is less than 3mm, there is a high risk of water slippage.

Winter tires

Winter tires still have good grip performance when roads are covered with snow and ice. The specially designed rubber tread makes the tires less affected by low temperature environment and excellent braking ability, ensuring driving safety.

- Use winter tires on all the four wheels.
- It is recommended to use winter tires while driving in icy or snowy days in winter or when the temperature is below 7°C.
- Use only radial winter tires of same dimensions, load range and rated speed as original ones on this vehicle.
- Please note that the tread of winter tires shall have patterns deep enough (tread depth not less than 4mm; otherwise, the applicability in winter will be limited).
- After installation of tires, check the tire inflation pressure.

⚠ WARNING

- **Winter and summer tires are designed according to the typical lane driving conditions under the corresponding seasonal conditions. It is recommended to use winter tires in winter. At low temperatures, the adaptability of summer tires is significantly poorer, thereby losing road adhesion and braking ability.**
- **If summer tires are used in severe cold conditions, cracks may appear on the tires, thereby completely damaging the tires, and causing excessive tire noise and loss of balance.**

⚠ WARNING

- **After using winter tires, there may be decreased driving traction on dry roads, increased road noise and shortened tread life. Please pay attention to the performance change of the vehicle in terms of maneuvering and braking after the winter tires are used.**
- **Please note that the maximum speed for winter tires is relatively low. Do not exceed the allowable maximum speed for the tires.**
- **Please note that please replace the winter tires with summer tires in time in order to ensure driving safety and performance when driving in the environment at the atmospheric temperature rising above 7°C.**

Inspecting tire pressure

The standard tire pressure data label of the original tire of this vehicle is attached to the B pillar on the driver's side.

- Check the tire pressure applicable to the vehicle from the data label (the listed pressure apply to both summer and winter tires).
- Unscrew the valve cap (if the valve cap is missing, a new one shall be provided in time).
- A high-quality tire pressure gauge is required to check the tire pressure. It is impossible to determine whether the tire pressure is appropriate only by visual inspection.
- Attach the tire pressure gauge to the valve.
- For inspection of tire pressure, the tire must be in a cold state. When the temperature increases, the tire pressure can be slightly higher than the specified value, and it is not necessary to reduce the tire pressure.
- Balance the weight of occupants and luggage, avoid slopes and adjust tire pressure according to vehicle load.
- Install and tighten the valve cap.

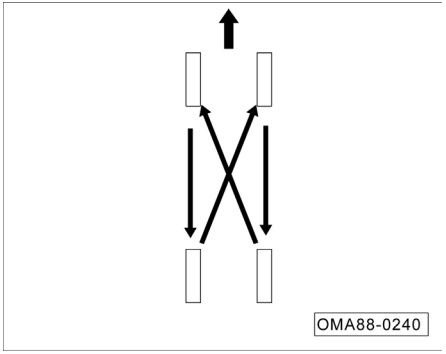
i NOTE

- The current wheel tire pressure can be viewed through the instrument cluster display information.
- Be sure to reinstall the valve cap on the valve core. The valve cap can prevent dust and moisture from entering the tire.

⚠ WARNING

- **Abnormal tire pressure may cause tire burst, resulting in a traffic accident, injury or even death.**
- **Check the tire pressure at least once a month or before long-distance driving. The tire pressure must meet the specified requirements to prevent accidents.**
- **Insufficient tire pressure will exacerbate tire deflection, and tires are extremely prone to overheating, which may lead to tread separation and tire burst.**
- **Abnormal tire pressure, too low or too high, will cause early wear of tires and reduce the maneuvering stability of the vehicle.**

Service life of tires



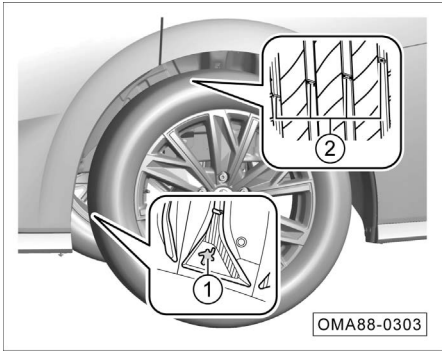
Service life of tires depends on tire pressure, driving style and tire assembly conditions.

If the front tires are worn more serious than the rear tires, it is recommended to perform tire rotation for the front and rear wheels as shown, so as to make the service life of all tires about the same.

⚠ WARNING

For vehicles with a tire pressure monitoring system, tire rotation or replacement needs to be operated by professionals at the GAC Motor authorized shop.

Tread wear indicator



The mark ① is used to indicate the wear condition of the tire outer circle pattern. If the tire outer circle pattern wears to the condition as shown, the tire can no longer be used safely and must be replaced immediately.

The height of tread wear indicator ② is 1.6 mm. If the tread pattern is worn to the indicator surface, this tire can no longer be used safely and must be replaced immediately.

Wheel balance

The wheels of the new vehicle are already balanced. Due to various reasons, the wheels may go unbalanced during operation, which can be manifested by the vibration of the steering mechanism.

Because unbalanced wheels can cause excessive wear on the steering system, wheel suspension mechanism and tires, the wheels shall be rebalanced.

In addition, wheels must be rebalanced after installation of a new tire or tire repair for any wheel.

Wheel misalignment

Wheel misalignment will cause uneven and excessive wear of the tires, affecting driving safety. If uneven and excessive wear of the tires is found, please go to the GAC Motor authorized shop to check the wheel alignment as soon as possible.

6.8 Tire chain

In winter, driving in harsh environments such as snowy or icy roads can increase the degree of tire wear or cause other failures. To reduce failures in winter, the following opinions must be followed:

- When driving in deep snow, it is necessary to install tire chains on the tires. If so, be sure to choose an equivalent product whose size and type meet the specifications of the tires on the vehicle. Failure to do this will adversely affect the performance and safety of the vehicle. Moreover, operations such as full-load driving, speeding, emergency acceleration, emergency braking, and emergency turning are potentially dangerous.
- During deceleration, make full use of the engine braking function. Emergency braking on snowy or icy roads will cause the vehicle to drift and slip. Keep a proper safe distance from the lead vehicle, and step on the brake pedal slightly. Note that the tire chain installed on the tire can provide a certain friction force, but it cannot prevent sideslip.

NOTE

Various countries and regions have different regulations on tire chains. Before assembling tire chains, please refer to the laws and regulations of the corresponding country and region. Do not install tire chains without understanding the laws and regulations of the corresponding country and region that may restrict the use of tire chains.

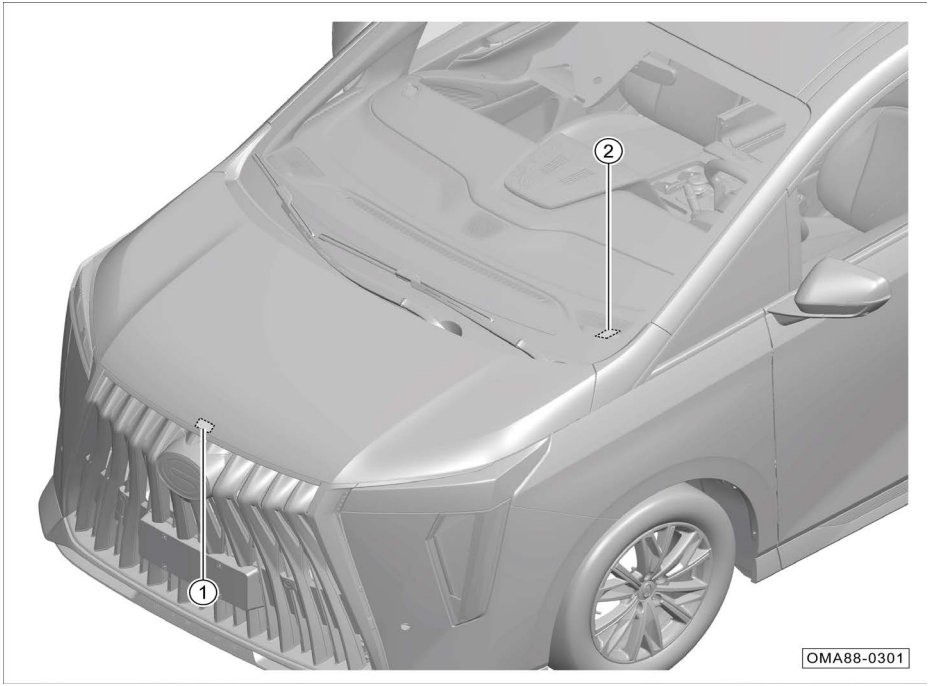
CAUTION

Install tire chains on all tires to ensure balanced driving in all weather. It shall be borne in mind that after installation of tire chains, the vehicle may be underpower. Even if the road surface is in good condition, drive carefully. While driving, neither exceed the specified speed limit of tire chains nor exceed 50km/h, whichever is lower.

CAUTION

- If tire chains are installed on the tires, the size and type of tire chains shall be consistent with those of the standard tires of the vehicle. Otherwise, the driving safety and maneuvering of the vehicle will be adversely affected.
- Tire chains must be installed in pairs on the front wheels rather than on the rear wheels.
- Do not use tire chains on dry ground. After driving to snow-free roads, remove tire chains.
- After installing the tire chains as closely as possible to the front tires, drive 0.5~1.0km, and then tighten the tire chains again.

7.1 VIN



The locations of the vehicle identification number (VIN) is shown in the figure:

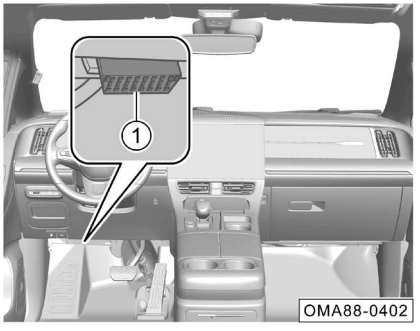
① VIN: located on the engine compartment partition.

② VIN: located on the left side of the instrument panel.

NOTE

The position indication and quantity of vehicle identification number (VIN) are not complete. Please refer to the actual vehicle.

OBD DLC

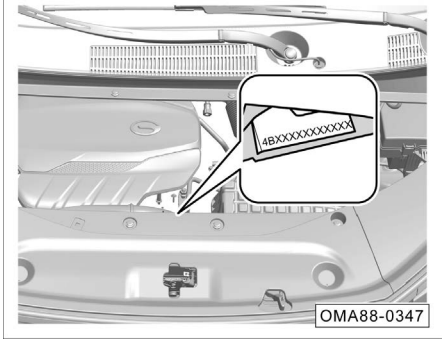


The OBD DLC ① for reading the electronic VIN is located at the lower left of the instrument panel, through which data such as the electronic VIN and vehicle status information can be read by using a special diagnostic scan tool.

Vehicle nameplate

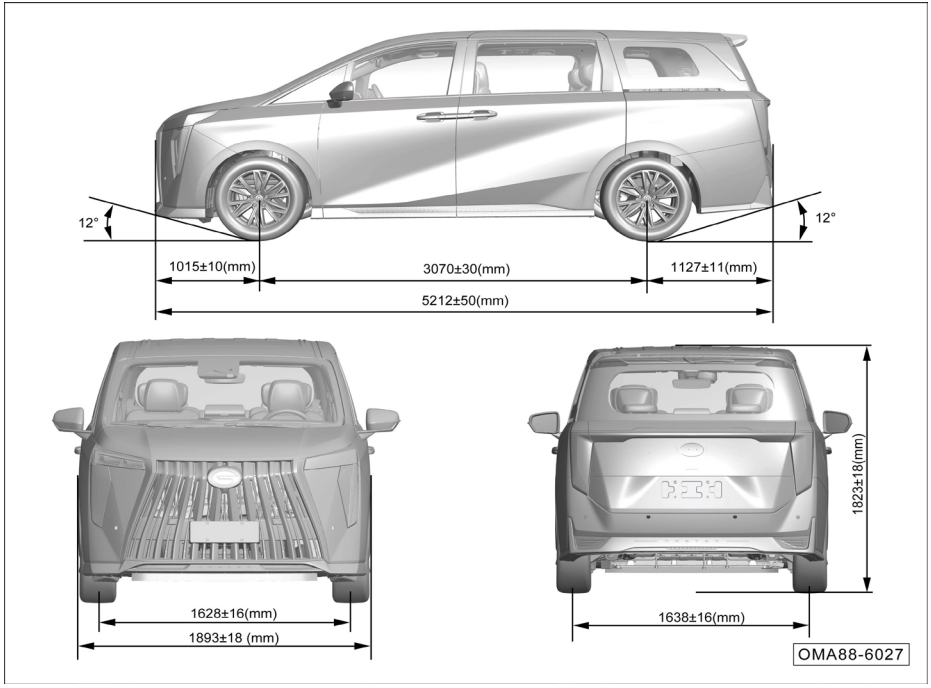
The vehicle nameplate is located at lower part of the left B-pillar. The information contained in the vehicle nameplate includes the manufacturer, VIN, vehicle model, brand, engine displacement, engine model, maximum net power of engine, gross vehicle weight rating, seating capacity, date of manufacture and country of manufacture, depending on the actual vehicle.

Engine model and factory number



Engine model and factory number as arrowed are indicated on the engine block (behind the alternator).

7.2 Dimensions & parameters of vehicle



Dimensions

Item		Parameters	
		Value	Unit
Overall length		5212±50	mm
Overall width		1893±18	mm
Overall height		1823±18	mm
Wheelbase		3070±30	mm
Wheel track	Front wheel	1628±16	mm
	Rear wheel	1638±16	
Front overhang		1015±10	mm
Rear overhang		1127±11	mm
Approach angle (full load)		12	°
Departure angle (full load)		16	°

Note: External rearview mirrors (one on the right and one on the left) near the junction of the lower end of the A pillar and the front door and the antenna above the rear of the roof are not included in the overall width.

7.3 Vehicle mass & parameters of engine and fluids

Mass

Model	Kerb mass of vehicle (kg)			Gross vehicle weight rating (kg)		
	Kerb mass (kg)	Front axle load	Rear axle load	Gross vehicle weight rating	Front axle load	Rear axle load
GAC6520MDA6A	2060	1137	923	2790	1333	1457
	2150	1176	974			

Note:
- Note 1: The tolerance of dimension parameters is ± 1%.
- Note 2: The tolerance of mass parameters is ± 3%

Comprehensive parameters

Item	Performance parameter	Unit
	GAC6520MDA6A	
Seating capacity	7	Person
Minimum turning diameter	12.2	m
Maximum gradeability	40	%
Maximum speed	200	km/h
NEDC fuel consumption	9.7	L/100km

7. Technical data

Parameters of engine

Model	4B20J1
Layout	Front mounted, transverse layout
Type	In-line four-cylinder, four-stroke, turbocharged and intercooled, GDI, double overhead camshaft
Number of cylinders	4
Ignition order	1–3–4–2
Bore (mm)	83
Travel (mm)	92
Displacement (mL)	1991
Compression ratio	(10±0.3):1
Rated power/speed (kW/(r/min))	185/5250
Maximum net power/speed (kW/(r/min))	170/5250
Maximum torque/speed (Nm/(r/min))	400/1750~4000
Maximum net torque/speed (N m/(r/min))	380/1750~4000
Stable idling speed (r/min)	750±50
Emission level	China VI

Specifications and capacity of fuel/oil/fluid

Item	Specification	Capacity	
Fuel [1)]	please refer to the fuel label on the fuel filling cap	Capacity	65L
Engine coolant [2)]	DF-6, -35°C coolant	Capacity	10.18±0.3L
Engine oil	Grade: APISN/ILSACGF-5 Viscosity: SN5W-30	Total filling volume [3)]	5.3L
		Change [4)]	4.5L
Transmission fluid (8AT)	ATFAW-1	Capacity	6.6±0.1L
Brake fluid	DOT4	Capacity	0.77±0.15L
Windshield washer fluid	44% methanol with freezing point of -30°C, and 56% water with hardness not more than 205g/t	Capacity	3L
A/C refrigerant	HFC-134a	Capacity	960±20g

Note: 1) Long-term use of fuels with a sulfur content higher than the standard value may result in excessive emissions. Please pay attention and use fuels that comply with local standards for vehicles.

2) Including the coolant in the reservoir and the residual coolant in the engine.

3) Capacity of the overhauled engine assembly.

4) Including the replacement of oil filter.

7.4 Transmission and chassis parameters

Transmission parameters

Model	TG-81SC
Type	Automatic transmission, 8-speed
Drive	FWD
Final ratio	3.329
1st gear	5.250
2nd gear	3.029
3rd gear	1.950
4th gear	1.457
5th gear	1.221
6th gear	1.000
7th gear	0.809
8th gear	0.673
Reverse gear	4.015

Wheels

Specifications of rim		7.0Jx18	
Tire specification		225/55R18	
Tire pressure	—	Front wheel	Rear wheel
	No load	240kPa	240kPa
	Full load	260kPa	260kPa
Specifications of spare rim		T125/70R18	
Specifications of spare tire		4J×18	
Spare tire pressure		420kPa	

Note: The standard air pressure data label of the original tire of this vehicle is pasted under the B pillar on driver's side.

Suspension

Type	Front suspension	Rear suspension
	McPherson independent suspension	Multi-link independent suspension

Steering gear

Type	Rack and pinion mechanical steering gear
Power steering type	Electric power steering

Brake

Type	Hydraulic brake, X-type hydraulic double circuit
Front wheel	Disc brake
Rear wheel	Disc brake
Parking brake	Electric park brake (EPB)

Dynamic balance of wheels

Designation		Residue dynamic unbalance
Front wheel	Inner side	≤8 g
	Outer side	≤8 g
Rear wheel	Inner side	≤8 g
	Outer side	≤8 g

Free travel of brake pedal

Designation	Parameters
Travel	≤108mm
Free travel	≤6mm

Technical parameters of brake linings

Designation	Parameters
Wear limit of front wheel brake lining (excluding the backplate of brake lining)	2mm
Wear limit of rear wheel brake lining (excluding the backplate of brake lining)	2mm

Wheel alignment

Designation		Parameters
Front wheel	Individual toe-in	2′±3′
	Wheel camber	-25′±30′
	Kingpin caster angle	6°47′±45′
	Kingpin inclination angle	13°48′±45′
Rear wheel	Individual toe-in	3′±3′
	Wheel camber	-39′±30′

7. Technical data

Battery

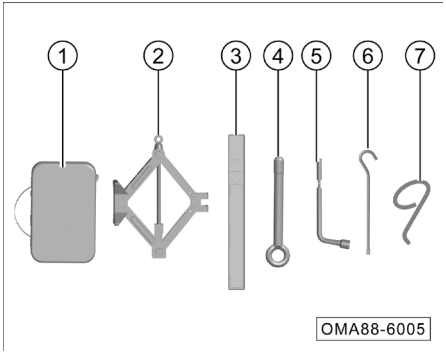
Item	Parameters
Rated voltage	12V
Capacity at 20 hr	75Ah
Low temperature start current (EN)	680A

Lamps

All vehicle lamps are LED lamps. For replacement, please visit the GAC Motor authorized shop.

8.1 Driver's tools

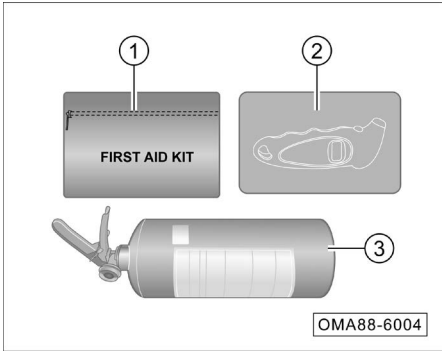
Driver's tools



The following tools are provided with this vehicle. After use, they shall be cleaned in time and placed back.

① Tire repair kit
② Jack *
③ Warning triangle
④ Towing hook
⑤ Wheel bolt removal wrench*
⑥ Special wrench for jack*
⑦ Hub trim cover removal tool

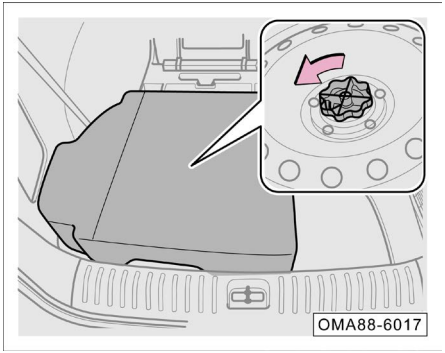
First aid kit*



The first aid kit of this vehicle includes:

① Medical kit: The medical kit contains trauma emergency medical supplies (e.g. medical gauze package, medical adhesive tape, medical ventilated bandage, triangular bandage, iodine swabsticks, dressing tweezers, safety scissors) for stopping bleeding and dressing, which are used for trauma emergency treatment.
② Tire pressure gauge: for measuring tire pressure.
③ Portable dry powder fire extinguisher: for emergency fire extinguishing in case of fire in the vehicle.

Spare tire*



Take out the spare tire.

- Open the liftgate.
- Open the spare tire foam cover.
- Unscrew the spare tire center handwheel counterclockwise and take out the spare tire.

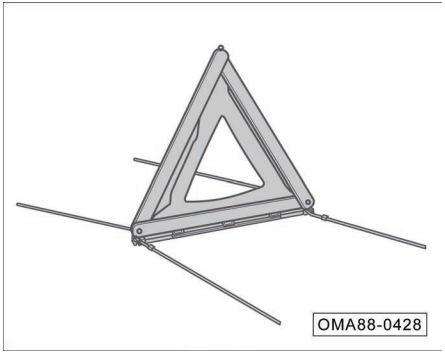
NOTE

The spare tire has been inflated before delivery, but shall be checked regularly to ensure that it is at the specified maximum pressure, and multiple inspections shall be carried out within 1 year.

WARNING

- **The spare tire shall be used in strict accordance with its service requirements to avoid dangers.**
- **It is forbidden to install and use more than 1 spare tire at the same time.**
- **It is forbidden to use spare tires that have been damaged or worn to the limit.**
- **The storage and service life of spare tires is 6 years. It is prohibited to use them beyond the time limit.**
- **After installing the spare tire, check the tire pressure as soon as possible to keep it within the specified range.**
- **When the spare tire is used, the maximum speed shall not exceed 80km/h, and sharp acceleration and emergency braking shall be avoided.**

8.2 Use of warning triangle



- Open the liftgate.
- Fold and turn up the 3rd-row seat.
- Take out the warning triangle below the 3rd-row seat and unfold it for use.

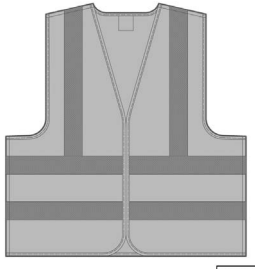
Placement distance

Ordinary highway		Expressway
Daytime	Night	
≥50 m	≥80 m	≥150 m

CAUTION

The data above is for reference only. Please place the warning triangle at the distance specified by traffic regulations.

8.3 Use of reflective vest



- If it is necessary to stop the vehicle due to an accident or other failures, take out the reflective vest from the glove box to put on it well before getting off the vehicle for checking and troubleshooting.

i NOTE

- While handling vehicle accidents, be sure to wear a reflective vest as required to attract the attention of passersby or other drivers regardless of the lighting conditions.
- After using the reflective vest, please store it in the glove box properly. If necessary, clean it according to the indication on the collar mark to maintain the reflective performance.

8.4 Replacing flat tires*

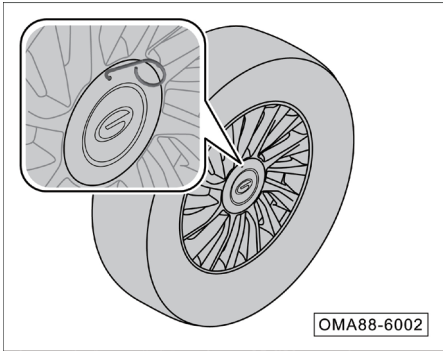
Preparations

- Apply the parking brake.
- Set the gearshift lever to the P position.
- Set the START/STOP button to the “OFF” position and turn on the hazard warning lamp.
- Place a warning triangle in a suitable position behind the vehicle.
- Find a suitable object to wedge the wheel in the diagonal position of the one to be replaced to prevent the vehicle from moving.
- Take out the driver’s tools and spare tire from the trunk.

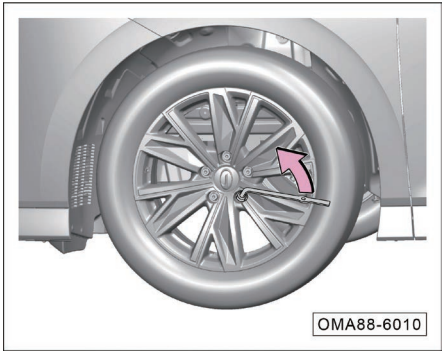
⚠ WARNING

- **Strictly follow relevant regulations.**
- **Ask all occupants leave the vehicle and wait in a safe place.**

Unscrewing the wheel bolts



- For models equipped with the floating wheel hub trim cover*, remove the trim cover before removing the wheel. Take out the wheel hub trim cover removal tool* from the trunk and pry the trim cover from the small hole.

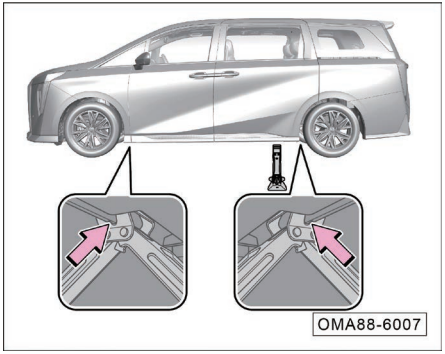


Set the wheel bolt removal wrench firmly on the wheel bolt, and unscrew the wheel bolts counterclockwise.

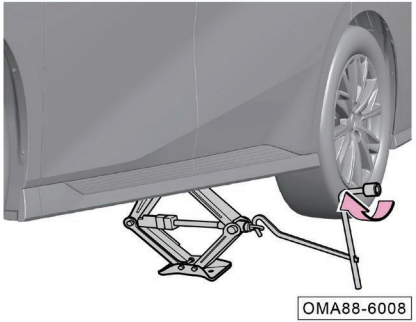
CAUTION

Loosen the wheel bolts just one turn before lifting the vehicle. After lifting the vehicle, unscrew the wheel bolts completely and remove the flat tire.

Lifting the vehicle



- Place the jack directly under the spine closest to the flat tire.
- Extend the jack high to ensure that the groove of the jack can engage with the spine.
- Check whether the jack is stable and tightly attached to the ground.



- Assemble the wheel bolt removal wrench, special wrench for jack and jack.
- Extend the jack high clockwise to jack up the vehicle to keep the tire off the ground.

⚠ WARNING

Improper use of jack will cause serious injury.

- **Always use the jack on a hard and flat ground, or a place hard pad (not thicker than 1 cm) under the jack as needed.**
- **Always follow the precautions for jack operation strictly.**
- **Decouple the trailer, if any, from the vehicle.**
- **Monitor the vehicle condition throughout the jacking, and if the vehicle body is noticeably tilted, stop jacking, identify the problem, and never resume the jacking until the problem is solved.**

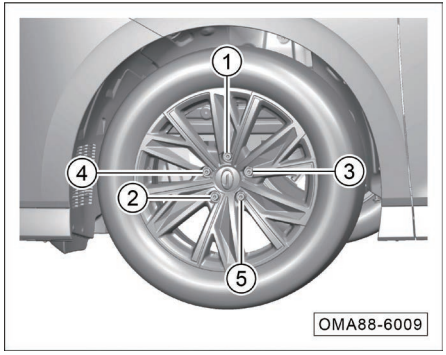
⚠ WARNING

- **Never use the jack provide together with your vehicle to jack up other weights or vehicles.**
- **When the jack is used, do not start the engine, otherwise an accident will occur.**
- **When lifting the vehicle with a jack, remember not to place any part of your body under the vehicle to avoid accidents.**
- **If it is required to work under the vehicle, be sure to place a suitable protective support under the vehicle.**

Removing the flat tire.

- With the vehicle lifted up, use a wheel bolt removal wrench to screw off the loosened wheel bolts.
- Remove the flat tire.

Installing the spare tire



- Install the spare tire on the vehicle.
- Install all the wheel bolts, and pre-tighten them using the wheel bolt removal wrench in the order of ①~⑤ as shown in the figure.
- Give a verbal warning, and after confirming that nobody is around the car, rotate the jack wrench counterclockwise to lower the vehicle.
- Tighten all wheel bolts using the wheel bolt removal wrench.
- In order to avoid the noise of the vehicle during driving later on, please remember the locations of various tools, put them back in place after use and fix them.

CAUTION

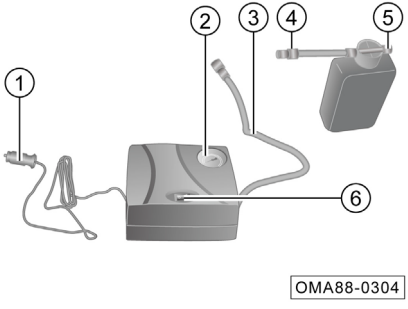
After installing the wheel, please go to the GAC Motor authorized shop in time to check the tightening torque of the wheel bolts (125 ± 10N•m). Otherwise, the bolts may be loose while the vehicle is running, easily causing traffic accidents.

⚠ WARNING

- **Always keep the threads on the wheel bolts and hubs clean and free from adherent matters such as grease so that the bolts can be tightened easily.**
- **During replacement of a tire, if the bolts are rusted or cannot be tightened easily, always replace the concerning bolt and clean the concerning thread hole.**
- **When the spare tire is not in use, always securely fix it in the mounting position.**

8.5 Inflator pump and tire sealer

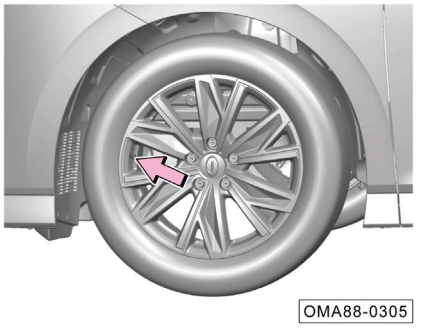
Inflator pump and tire sealer are used to rectify the faults such as tire leakage or low tire pressure caused by a nail in a tire.



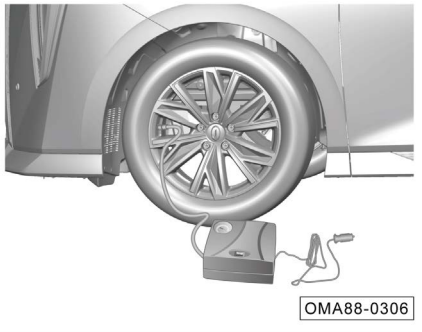
① Power plug
② Air pressure gauge
③ Inflator tube
④ Sealer tube
⑤ Inflator tube fitting
⑥ Power switch

Inflator pump

Operate as follows while inflating a tire:

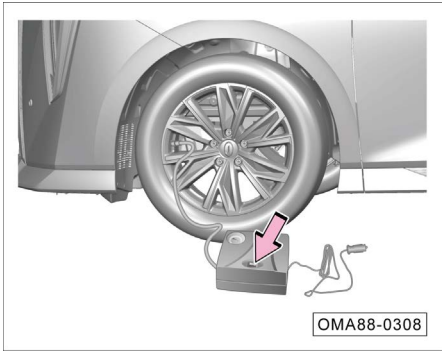


- Take out the automatic inflator pump from the trunk.
- Remove the tire valve cap.



- Screw the fitting of the inflator pump into the tire valve, during which a slight air leak will be heard and it indicates that the air passage between the pump and tire has been established. In this case, go on screwing in the fitting.

- Open the trim cover of power outlet (12V), and insert the plug into the power outlet (12V) to start the vehicle.



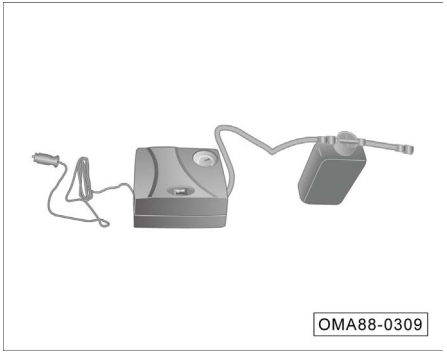
- Press the power button to start to inflate the tire, and observe the change in the indicated pressure on the tire pressure gauge. When the indicated pressure reaches the standard pressure, cut off the power to stop inflating the tire.

NOTE

The standard tire pressure label is attached to the B-pillar on the driver's side.

Tire sealer

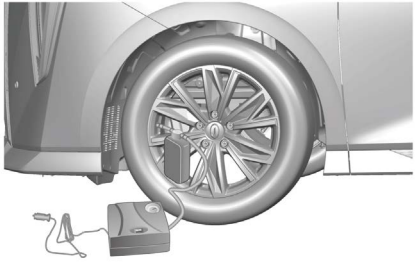
The tire sealer should be used as follows:



- Take out the inflator pump and the tire sealer from the trunk.
- Shake the bottle and connect the connector of inflator pump with the inflator tube fitting.

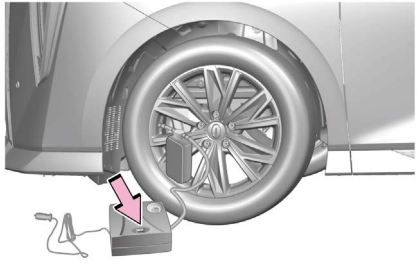
CAUTION

- The tire sealer bottle shall not be placed upside down.
- The tire sealer is not edible, so inhalation or swallowing shall be avoided. If it is ingested into the body by accident, please don't induce vomiting and go to hospital immediately.
- Protect your skin or eyes against the tire sealer; otherwise, it may cause irritation to your skin or eyes. If the tire sealer touches the skin accidentally, it can be thoroughly cleaned with water and soap; If the tire sealer accidentally enters the eyes, immediately rinse with clean water. If you feel unwell, seek medical attention immediately.



- Remove the tire valve cap.
- Screw the water hose connector onto the tire valve.

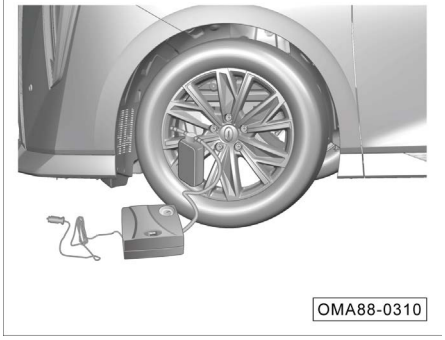
- Open the trim cover of power outlet (12V), and insert the plug into the power outlet (12V) to start the vehicle.



- Press the START/STOP button so that the sealer is injected into the tire. The air pressure is relatively high and between 2.8bar and 4bar during sealer application. After sealer application, the air pressure will drop to about 0.7-1.4bar. When the air pressure reaches the standard value, switch off the power supply and screw on the valve cap.
- Disconnect the sealer tube, the inflator tube and the plug in turn, and put them back to the original position.
- Start the vehicle and drive 3~5km at a speed of 20~60km/h.

CAUTION

If the tire pressure cannot reach the specified pressure within 10 min, it cannot be repaired.



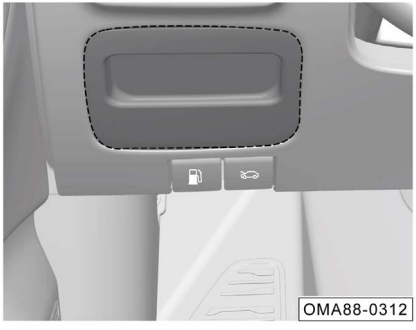
- Park the vehicle in a safe place, and connect the inflator tube to the tire again.
- Observe the air pressure value and do inflation if there is a significant drop. If the tire pressure is lower than 1.3bar, the tire cannot be repaired. You should go to the GAC Motor authorized shop for overhaul as soon as possible.

WARNING

- **After the tire repair with the tire sealer, go to the GAC Motor authorized shop for repair or go to a professional tire repair shop for repair as soon as possible.**
- **The driving speed should not exceed 80 km/h after the completion of the tire repair with tire sealer.**

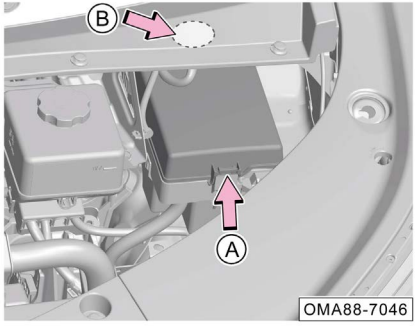
8.6 Fuse

Instrument panel PDU



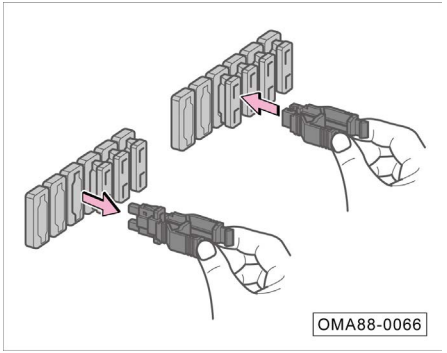
- Remove the storage compartment on lower guard plate of cab (as indicated by the dotted dash) to see the fuse above the instrument panel PDU.

Engine compartment power distribution unit (PDU)



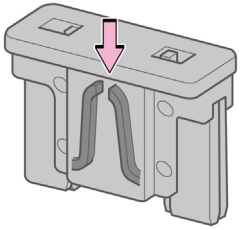
- Opening of engine hood
- Press the fixing clip (below the wiper cover) in the direction of arrows A and B to release the cover of the PDU.
- The fuse above the engine compartment PDU is exposed when the cover of the PDU is removed.

Replacing fuse



- Remove or install the fuse using the fuse puller in the engine compartment PDU.

Blown fuse



- If the fuse has blown, it is recommended to replace it at a GAC Motor authorized shop.

NOTE

Some electrical consumer may be equipped with multiple fuses, or multiple electrical consumers may share one fuse.

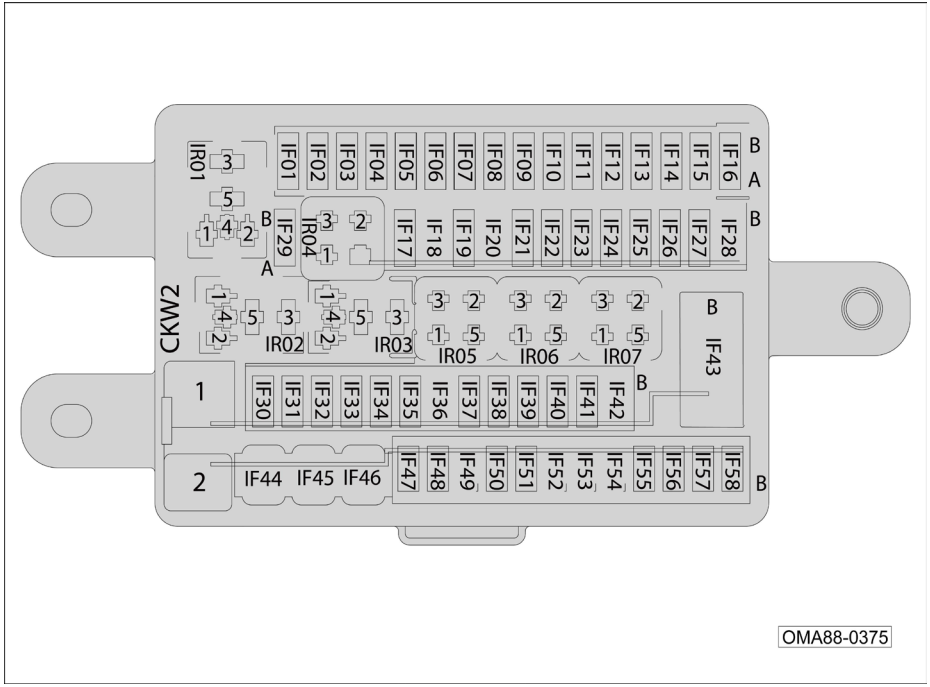
CAUTION

- All electrical consumers must be turned off before replacement of fuses.
- If it is required to replace the fuse, please consult the GAC Motor authorized shop.

WARNING

- **Fuses must not be reused.**
- **Do not use a fuse with rated current higher than the specified value, otherwise other components of the electrical system will be damaged.**
- **Using an inappropriate or repaired fuse will cause a short circuit or even a fire.**
- **The color and logo of the replaced fuse must be exactly the same as the original one.**
- **Never replace a fuse with metal sheets, clips, etc.**
- **The inside of the PDU must be kept clean and moisture-proof.**

8.6.1 Fuses in instrument panel PDU



The fuses may slightly vary from vehicle to vehicle. In this regard, the actual vehicle configuration shall prevail.

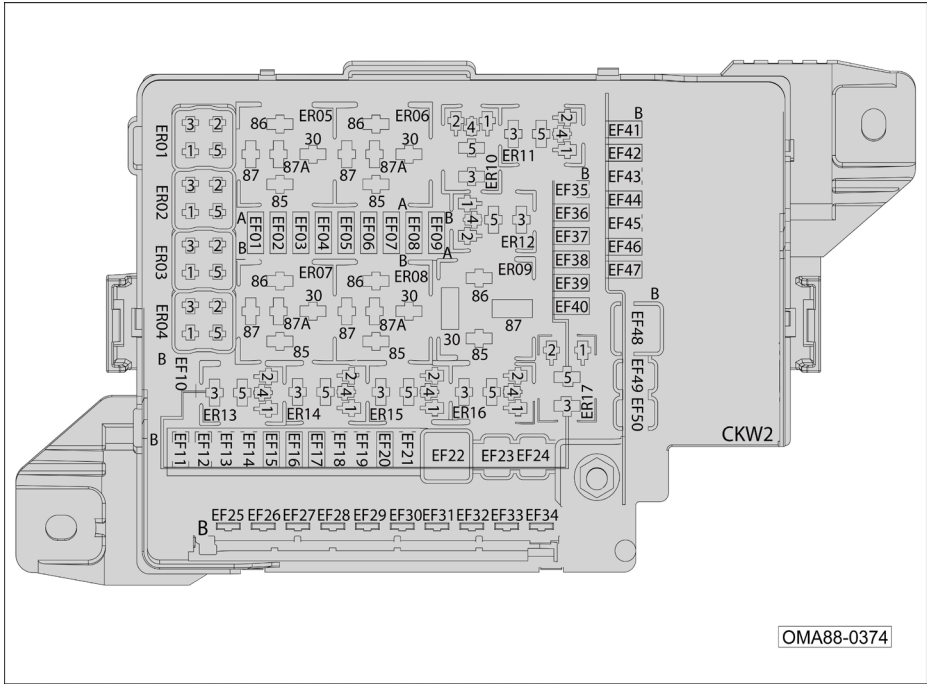
No.	Rated value	Feature/component
IF01	20A	Trunk 12V auxiliary power supply
IF02	7.5A	ICBM/GWM*/GWM-ETH*
IF03	10A	ACU*/WCM*/third-row right USB charging port*/second-row left seat connector (USB_ ACC power supply)/streaming interior rearview mirror*/third-row left USB charging port
IF04	25A	Rear 12V power outlet*/rear USB port*
IF05	20A	2nd-row right seat connector (USB_ACC power supply)*/rear USB port (TYPE C)*
IF06	—	—
IF07	—	—
IF08	20A	ACU*
IF09	20A	Left front seat connector (HVSM power supply)*
IF10	10A	WCM*/HVAC control unit/GWM*/GWM-ETH*/ left front seat connector (HVSM/front seat control unit power supply) */RCP/RLS
IF11	7.5A	GWM*/T-BOX ECU*/GWM-ETH*
IF12	10A	CDC electronically controlled suspension ECU*
IF13	7.5A	Electronic dimming interior rearview mirror*/ defogger relay (ER07)/IBCM/rear blower relay (ER08)
IF14	—	—
IF15	10A	2nd-row left seat connector (2nd-row seat control unit massage power supply)*/2nd-row right seat connector (2nd-row seat control unit massage power supply)*
IF16	—	—
IF17	10A	SRS ECU-H*/SRS ECU-L*
IF18	7.5A	ECM/8AT TCU
IF19	7.5A	IBCM/T-BOX ECU*/IC*/GWM*/GWM-ETH*
IF20	7.5A	Brake switch
IF21	7.5A	ESPI
IF22	10A	EPS ECU/gearshift actuator control module/ HVAC control unit/CDC electronically controlled suspension ECU*/EPB ECU*/cup holder switch*/GSM
IF23	7.5A	2nd-row right seat connector/right sliding door control unit/2nd-row left seat connector/left front seat connector/RCP/power sunroof ECU/left sliding door control unit/power sunshade
IF24	—	—
IF25	7.5A	Left rear combination lamp B/right rear combination lamp A/left rear combination lamp A/right front combination lamp/left front combination lamp
IF26	7.5A	FAPA ECU*/RPA ECU*/ACU*/clock spring

No.	Rated value	Feature/component
IF27	—	—
IF28	15A	Clock spring (steering wheel heating)*
IF29	—	—
IF30	20A	Left rear window regulator motor (with four-window express-up & down)
IF31	20A	IBCM (door lock power supply)
IF32	20A	IBCM (main power supply)
IF33	20A	IBCM (door lock and rear wiper power supply)
IF34	30A	ACU
IF35	7.5A	GWM*/GWM-ETH*
IF36	15A	IBCM (turn signal lamp power supply)/left rear combination lamp B/left rear combination lamp A/right rear combination lamp A
IF37	15A	8AT TCU/GSM
IF38	20A	Right rear window regulator motor (with four-window express-up & down)
IF39	7.5A	IC
IF40	25A	IBCM (main lighting power supply 1)/left front combination lamp/right front combination lamp
IF41	15A	OBD DLC 2/OBD DLC/cup holder switch *
IF42	25A	IBCM (main lighting power supply 2)/left front combination lamp/right front combination lamp

No.	Rated value	Feature/component
IF43	Dark current switch	ACU/WCM*/HVAC control unit/GWM/GWM-ETH/left front seat connector (HVSM/front seat control unit power supply)*/RCP/RLS/T-BOX ECU*/CDC electronically controlled suspension ECU*
IF44	30A	PLG *
IF45	30A	Right front door control module
IF46	30A	Left front door control module
IF47	—	—
IF48	10A	FAPA ECU*/left rear main BSD sensor*/right rear main BSD sensor*
IF49	30A	Right sliding door control unit*
IF50	30A	2nd-row left seat connector (2nd-row seat control unit heater power supply)*
IF51	20A	Left front seat connector (motor power supply)*
IF52	30A	Right front seat connector (motor power supply)/2nd-row left seat connector (2nd-row seat control unit massage power supply)/2nd-row right seat connector (2nd-row seat control unit massage power supply)
IF53	15A	IBCM (windshield washer motor power supply)
IF54	30A	Left sliding door control unit
IF55	20A	Power sunroof ECU
IF56	20A	Power sunshade*

No.	Rated value	Feature/component
IF57	10A	Clock spring/touch screen/left sliding door control unit/right sliding door control unit/left front seat connector (seat control unit)
IF58	7.5A	PM2.5 sensor/PLG*/RF receiver module/ fragrance module *
IR01	—	ACC relay
IR02	—	Lock-up relay 1
IR03	—	Lock-up relay 2
IR04	—	IG1 relay
IR05	—	—
IR06	—	—
IR07	—	IG2 relay

8.6.2 Fuses in engine compartment PDU



The fuses may slightly vary from vehicle to vehicle. In this regard, the actual vehicle configuration shall prevail.

No.	Rated value	Feature/component
EF01	—	—
EF02	—	—
EF03	—	—
EF04	7.5A	ECM
EF05	—	—
EF06	—	—
EF07	7.5A	Exterior rearview mirror heater*
EF08	15A	Left front tweeter/right front woofer
EF09	—	—
EF10	—	—
EF11	—	—
EF12	7.5A	A/C compressor
EF13	—	—
EF14	—	—
EF15	25A	Gearshift actuator control module*
EF16	20A	Fuel pump
EF17	20A	Front wiper motor/wiper speed control relay (ER11)/wiper relay (ER12)
EF18	10A	Brake switch/horn relay (ER13)
EF19	7.5A	Main relay (ER17)/ECM/front blower relay (ER05)
EF20	25A	Gearshift actuator control module*

No.	Rated value	Feature/component
EF21	—	—
EF22	60A	To instrument panel PDU
EF23	30/40A	ESPI
EF24	50A	2nd-row left seat connector (seat control unit power supply)
EF25	30A	Starter excitation coil
EF26	40A	ACC power supply
EF27	40A	Connector to HVAC assembly
EF28	40A	Rear windshield defogger heater*
EF29	—	—
EF30	50A	Power amplifier module *
EF31	50A	ACU*/WCM*/HVAC control unit/GWM*/GWM-ETH*/left front seat connector (HVSM/front seat control unit power supply)*/RCP/RLS*/T-BOX ECU/CDC electronically controlled suspension ECU*
EF32	60A	Connector to instrument panel PDU
EF33	—	—
EF34	—	—
EF35	10A	Cooling fan control module/fuel pump relay (ER14)
EF36	15A	Ignition coil 1/ignition coil 2/ignition coil 3/ignition coil 4
EF37	15A	ECM (main relay power supply)

No.	Rated value	Feature/component
EF38	10A	Upstream oxygen sensor/downstream oxygen sensor/compressor relay (ER04)/starter relay 1 (ER15)/starter relay 2 (ER16)
EF39	10A	PCV heater relay (ER03)/PCV heater/electronic intake air recirculation valve/canister solenoid valve/oil control valve (intake)/oil control valve (exhaust)/electronic thermostat/canister vent valve
EF40	—	—
EF41	7.5A	LDW ECU*/MRR module*
EF42	25A	2nd-row right seat connector (motor power supply)
EF43	—	—
EF44	30A	2nd-row left seat connector (motor power supply)
EF45	—	—
EF46	—	—
EF47	30A	IG1 power supply/IG2 power supply
EF48	30/40A	ESPI
EF49	50A	2nd-row right seat connector (2nd-row seat control unit power supply)
EF50	40A	Rear blower
ER01	—	—
ER02	—	—
ER03	—	PCV heater relay
ER04	—	Compressor relay
ER05	—	Blower relay
ER06	—	—
ER07	—	Defogger relay
ER08	—	Rear blower relay
ER09	—	—
ER10	—	—
ER11	—	Wiper speed control relay
ER12	—	Wiper relay
ER13	—	Horn relay
ER14	—	Fuel pump relay
ER15	—	Starter relay 1
ER16	—	Starter relay 2
ER17	—	Main relay

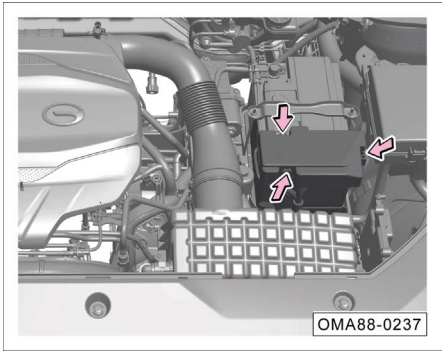
8.7 Emergency start

Jumper cable

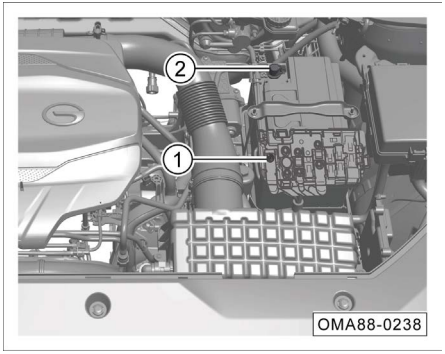
If the engine cannot start because the battery is too low, it can be started by connecting this battery to the battery of another vehicle a jumper cable.

⚠ WARNING

- **The engine compartment is a high-risk area. Improper operation can easily cause casualties.**
- **Be sure to carefully read and observe the safety warning instructions related to battery operation before starting operation on the battery.**



1. Turn off all electrical consumers (such as A/C and AV system).
2. Open the engine hood, and press the fixing clip as arrowed to remove the cover of the battery positive terminal.



3. Connect the clamp of the red positive jumper cable to the battery positive ① of the vehicle, and connect the clamp on the other end to the battery positive of another vehicle; connect the clamp of the black negative jumper cable to the battery negative ② of the vehicle, and connect the clamp on other end to the engine block of another vehicle or a metal part firmly connected to the engine block of another vehicle.
4. Start the engine of the vehicle with power battery and let it idle. Then, start the engine of the vehicle with the depleted battery till the engine runs smoothly.
5. After the engine runs smoothly, remove the jumper cables in the reverse order.

CAUTION

- While connecting the batteries of two vehicles, be sure to first connect the positive terminal and then the negative terminal.
- Properly place the jumper cable to avoid contact between the cable and the moving parts of the engine.

⚠ WARNING

- **Be sure to turn off the headlamps before removing the jumper cables.**
- **Turn on the blower and rear windshield heater of the vehicle with the depleted battery to reduce the voltage peak generated when the cable are being removed.**
- **Remove the jumper cables with the engine running in the reverse order.**

⚠ WARNING

Improper use of jumper cables may cause battery explosion and serious injury.

- **The voltage of the power battery must be the same as that of the depleted battery, and the capacities of the two batteries shall also be the same. Otherwise, it may cause an explosion.**
- **Never expose the battery to an open flame, for fear of an explosion.**
- **Never connect the negative cable directly to the negative terminal of a depleted battery. There shall be no static electricity near the battery. Otherwise, the combustible gas produced by the battery may be ignited by sparks, causing an explosion accident.**
- **Never connect the negative cable to a fuel system component or a brake line. Never lean over the battery during operation. Be careful not to get burned by acid.**

⚠ WARNING

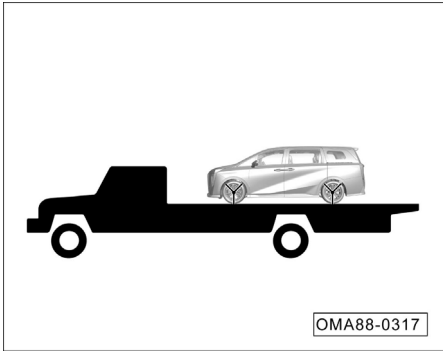
The jumper cable should be correctly connected to the positive and negative battery terminals according to the above instructions. It should not be connected to other parts of the battery; otherwise, it may cause fuse ablation or partial function failure of the vehicle, which will not be covered by the warranty.

8.8 Vehicle towing

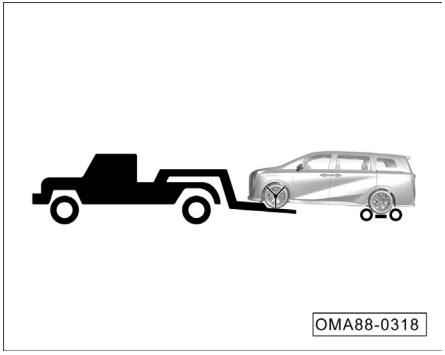
If the vehicle needs to be towed, it shall be towed by the GAC Motor authorized shop or a professional towing company.

It is recommended to use a rollback tow truck for towing. If the conditions cannot be met, a wheel-lift truck can also be used for towing the vehicle as appropriate.

Being towed by a rollback tow truck

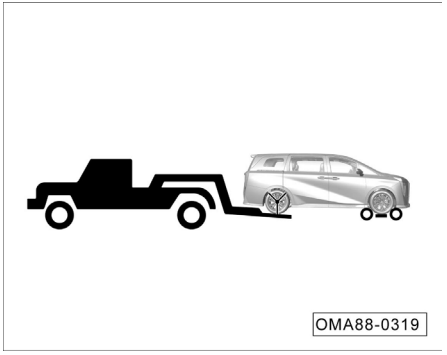


Being towed by a wheel-lift truck from the front



- Place a dolly under the rear wheels.

Being towed by a wheel-lift truck from the rear



- Place a dolly under the front wheels.

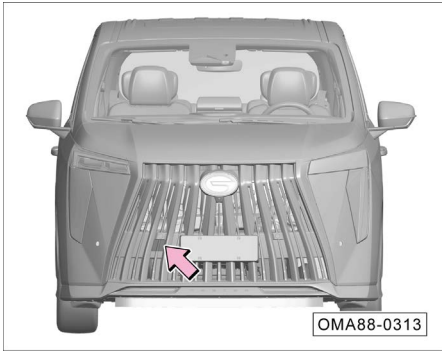
Emergency towing

If it is impossible to find a tow truck in an emergency, fasten the towing cable or towing chain in the emergency towing ring to temporarily tow the vehicle. However, this method is only suitable for low speed and short distance towing on a solid and flat road.

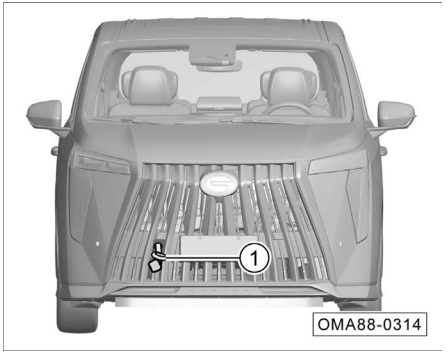
⚠ WARNING

In emergency towing, drive slowly to avoid violent operation. Excessive towing force will damage the vehicle.

Installing a towing hook



- Pry off the towing hook cover at the arrowed position using a slotted screwdriver wrapped with a cloth.



- Take out the towing hook ① below the 3rd-row seat.
- Screw the towing hook ① clockwise into the thread hole, and tighten the towing hook.

Precautions for towing

Before emergency towing, be sure to follow the instructions below:

- Hazard warning lamps of both towing and towed vehicles must be turned on and local traffic regulations must be complied with.
- The towing hook must be firmly tightened in the thread hole. Otherwise, the towing hook may slip out of the thread hole during towing.
- The towed vehicle must be shifted into "N".
- For the towed vehicle, set the ignition switch to the "ON" position and turn the steering wheel back and forth to confirm that the steering wheel can be turned.

During the emergency towing, be sure to follow the instructions below:

- Start the engine and drive at a slow speed till the towing rope is tight and then accelerate the vehicle slowly.
- Be sure to drive steadily and avoid sharp acceleration, sharp deceleration or abrupt turning.
- During towing, the towed vehicle shall be braked earlier than in normal conditions with the brake pedal lightly depressed.
- During towing, the towing rope must always be in a tight state.

8.9 Getting out of a trap

If the vehicle is stuck on a soft road such as sandy, muddy or snowy road, follow the steps below to get out of a trap:

1. Observe the areas in front of and behind the vehicle to ensure that there are no obstacles.
2. Turn the steering wheel to the left and to the right to grind areas around the front wheels to remove mud, snow or sand trapped around the tires.
3. Place wooden blocks, stones or other materials to help increase tire friction.
4. Start the engine and accelerate the vehicle slowly to get the vehicle out of the pit.
5. If the vehicle still cannot get out of the trap after attempts for several times, it is required to have a tow truck for rescue.

i NOTE

In the acceleration process, human assistance can be provided to push the vehicle from the front and rear for driving the vehicle out of the trap.

This manual describes the configurations, functions, performance parameters and product schematic diagrams of the full range of this vehicle model and other related information. For the specific configurations and functions of the vehicle, please refer to the delivered vehicle. The vehicle exterior/interior drawings in this manual are for reference only. In case of any discrepancy between the product schematic diagrams and the delivered vehicle, the delivered vehicle shall prevail.

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